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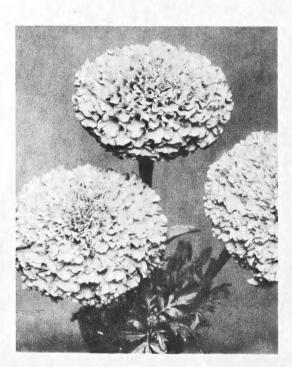
S. Department of Agricultures

Beauty and Abundance FROM YOUR OWN GARDEN

OUR 86th YEAR • 553

Recommend these New Flowers

CAN GET THEM FOR YOU



MARIGOLD, GLITTERS

The All-America Bronze Medal Winner for 1951. Of the chrysanthemum-flowered type, bearing fluffy, canary-yellow flowers 3 inches across and more. Long, strong stems. The blooms are produced very freely from early summer until frost. Bushy, erect plants growing 3 feet tall. Makes a showy display in the garden and provides plenty of flowers for cutting. Thin plants to 21/2 feet apart. Pkt., 25c.

PETUNIA . . FIRE CHIEF

An All-American selection that rocketed to public acceptance the first season. Bright red flowers on stocky, compact plants. Flower all summer and into autumn. Best color is obtained in cool weather and in full sun. Pkt., 30c.

CORNFLOWER . . BLUE BOY

A very attractive blue shade in this ever popular annual. Pkt., 15c.



GIANT HYBRID ZINNIAS

The loveliest Zinnias ever known-immense, ruffled flowers 6 inches in diameter, with graceful curved petals. Entirely free of the stiffness often associated with Zinnias. Airy, informal and in a wonderful color range. Strong plants 3 feet tall; very free blooming. Desirable for garden use and for cutting. Thin plants to 21/2 feet apart.

DAHLIA-FLOWERED ZINNIA CANARY BIRD

Large flowers of rich, canary yellow. Makes a beautoful bouquet with lavender or purple flowers. Pkt., 15c.

COSMOS... YELLOW FLARE

Flowers are single and produced in abundance. Flowers are about $2\frac{1}{2}$ inches in diameter, of bright yellow color and beautiful in bouquets. Plants about 3 feet tall. Pkt., 15c.

TORCH . . TITHONIA



All American Winner for 1951.

Easy to grow as Zinnias. Early. Will yield brilliant orange-scarlet cut-flowers all summer until frost. The flowers resemble single dahlias with bright gold centers. Plants are compact, waist to shoulder high, with soft green foliage. Performs best if planted in full sun, watered sparingly and fertilized very little, if at all. Pkt., 20c.

THE BARTELDES CATALOG IS COMPLETELY NEW

It is not merely a catalog. It is a reliable guide for the person that wants to grow vegetables, flowers,

or make a lawn.

You find some useful information on every page, and remember, it is backed by 86 years of seed growing and selling experience. Perhaps your grandparents or perhaps even your great-grandparents planted Barteldes Seeds way back in the Pioneer Days. 86 years goes back a long way.

Try to imagine what a mountain of vegetables you would have if all the vegetables grown from Barteldes Seeds over a span of 86 years were placed in one large pile.

You ladies will be especially interested in the information on flower culture. This was written by "Leon, Your Gardening Girl Friend" and summarizes many of the gardening hints that she has been telling about in weekly broadcasts.



Keep this book. You'll want to refer to it many times.

Remember that the Barteldes Seed Dealer in your home town is a friend and neighbor, and ready to give you personal service throughout the year.

ASPARAGUS

Asparagus does well in any well drained soil, and a good bed will last twenty years. It can be started either from seed or by setting out the plants, but for the home gardener we suggest setting out plants and saving a year in time.

When set in beds, the asparagus plants should be set at least 11/2 feet apart each way; when set in rows they should be about 18 inches apart with rows from 4 to 5 feet apart. Cut sparingly the first year, and fertilize liberally once a year.

Martha Washington, a fine variety, nice green color and rust resistant.

All Garden Plans Should Lead Off With BEANS

Beans are rightly the favorite vegetables of most home gardeners. They are extremely easy to grow, offer a variety of kinds and can be used in many

In beans you have a choice of green or wax snap beans in bush types or heavy yielding pole types; limas in bush and pole types; and also shell beans for winter.

Important

The maturity periods listed after the names should be classified as follows: In the Wax and Green Pod classes the figures indicate the number of days required to produce snap pods. In the Lima class the number of days required to produce green shell beans.

*Designates Varieties Recommended for "Quick Freezing.'

Never cultivate or work in beans when they are wet.

See page 17 for Vegetable Seed Prices.

Bush Green Pod and Wax Beans

Cultivate the soil thoroughly. Rows for hand cultivation should be 11/2 to 2 feet apart and for horse and tractor cultivation 3 to 4 feet apart. Make furrows 4 inches deep and cover seeds 1 to 11/2 inches. After plants are up thin to 6 inches apart.

Watch for insects. Holes in the leaves indicate leaf beetles. Dust with some good insecticide like Garden Guard, End O' Pest, or Acme All Round Spray. Dust early and keep ahead of the beetles.

To produce record breaking crops inoculate the seed with Nitragin, and spray blossoms with "Blossom Set'

WAX BEANS **Bush Type**

Packet 10c

TOP NOTCH GOLDEN WAX. Plants are small, compact, erect and very prolific. Pods are borne well off the ground which prevents rust and rot, are of golden yellow color, brittle, fleshy and solid, with wax-like texture. A good shell bean for winter use. Seed oval, white with purplish eye. Length of pod, 4 inches; height of plant, 14 inches; days to maturity, 48.

*ROUND POD KIDNEY WAX. Also called BRITTLE WAX. This is the best yellow wax bean on the market. Absolutely stringless. Plants make a strong growth and are very productive. Seed kidney-shaped, white with black eye. Length of pod, 5½ inches; height of plant 15 inches; days to maturity, 52.

*PENCIL POD BLACK WAX. Plants are very productive, with straight pods of light golden yellow color, round, meaty, deeply crease-backed, extremely brittle and without fiber. An excellent quality for home and market gardens. Seed black. Length of pod, 6 inches; height of plant, 16 inches; days to maturity, 54.

Printed in U. S. A.

GARDENING IS FUN

Sure it's fun to play golf, it's fun to fish and hunt, but when you get through you've had a lot of fun and perhaps a few fish or a few ducks, and often you come home empty handed.

But time spent in gardening practically guarantees you rewards of fine fresh vegetables, beautiful flowers and an attractive setting for your home.

Try it. You'll like it.



GREEN PODDED BUSH BEANS

Packet 10c

- CONTENDER. Resistant to common bean mosaic and powdery mildew; a good market bean because a good yielder. Vines 12 to 18 inches tall, pods thick, oval, 10 inches long, medium green, stringless and tender. Not recommended for commercial quick freezing. Seeds buff with brown mottling. Days to maturity, 50.
- *TOP CROP. All American Gold Medal Winner for 1950. Beans are borne during a short period of time resulting in a few large pickings. Being resistant to bean mosaic it consistently outyields other similar varieties. Pods are medium, light green, straight and slightly curved, $5\frac{1}{2}$ to 6 inches long, slender when young, meaty, entirely stringless and without fiber. The pods are free of blemishes, clean and attractive. Unexcelled for market, canning and freezing. Seeds are brown mottled and oval. Days to maturity, 53.
- *Stringless Black Valentine. This bean is prolific, hardy and heat resisting. Length of pod, 6 inches; height of plant, 16 inches; days to maturity, 50.
- TENNESSEE GREEN POD. Sometimes called Dwarf Kentucky Wonder. Pods are flat, broad, almost straight, stringless in the snap stage. Seed yellowish brown in color. Length of pod, 8 inches; height of plant, 14 inches; days to maturity, 52.
- *GIANT STRINGLESS GREEN POD. Long pod strain. Plants are large, spreading and exceedingly productive. Recommended for freezing preservation. Pods are stringless and brittle in all stages. Seeds oval, yellowish brown in color. Length of pod, 7 inches; height of plant, 17 inches; days to maturity, 54.
- *BURPEE'S STRINGLESS GREEN POD. Pods are somewhat variable in size, generally more or less scimitar curved, extremely brittle, absolutely stringless, usually contain six seeds very crowded in pod. Recommended for preservation by freezing. Seeds color coffee brown with black eye-ring. Length of pod, 6 inches; height of plant, 18 inches; days to maturity, 50.
- *TENDERGREEN. All American Award of Merit, 1933. Pods absolutely stringless and fiberless, fleshy, nearly straight and round. Recommended for freezing. Seed is brownish-black, mottled tan. Length of pod, 6 inches; height of plant, 16 inches; days to maturity, 53.
- BOUNTIFUL. Immense pods are rich green, thick, broad, uniform in shape, stringless but slightly fibrous. Color, straw yellow with dark brown eye-ring. Length of pod, 7 inches; height of plant, 16 inches; days to maturity, 48.
- *FULL MEASURE. Pods are absolutely stringless, and remain tender and meaty until the bean is fully matured and ready to shell. Seed reddish brown, buff field. Length of pod, 6 inches. height of plant, 17 inches; days to maturity, 54.
- *RIVAL. All American Winner. A new variety that will undoubtedly become very popular. Stringless pods are 6 to 6½ inches long, meaty, round, smooth, and straight. Seeds mottled purple-brown. Fine for home gardens, market, canning and freezing. Days to maturity, 52.
- LOGAN. Yields well under unfavorable conditions. 16-18 inches tall, pods 6-7 inches long, fine texture, straight and stringless. Seeds brownish purple on buff.

See page 17 for Vegetable Seed Prices.

* Designates varieties recommended for Quick Freezing.

Maturity Period Indicates Number of Days Required to Produce Snap Beans.



1 OF CROP

All American Gold Medal Winner for 1950.



GARDENING PAYS DIVIDENDS IN HEALTH AND ECONOMY

Most human efforts are put forth for economy, health, beauty or pleasure. But where, except in a garden, can you combine all four.

When you buy, let us say, a small quarter pound of seed beans, you are not merely buying a few beans but you are buying a miracle. Plant them, cultivate them and in due time you will be rewarded with bushels of delicious green beans worth many, many times their cost.

A bulletin issued by the U. S. Department of Agriculture in 1931 and revised in 1942 reported that half-acre garden, if properly cared for would supply vegetables having a market value of at least \$100.00 to \$150.00, sufficient for a family of five or six. Now that was back in 1942. With present prices the value would be doubled.

And the work? It's not work. It's interesting, healthful exercise.

You just can't beat it.

POLE BEANS

Pole Beans are heavy yielders, but need more room than do Bush Beans.

Generally pole beans are trained on one strong, solidly set pole but often on three or four poles set in the shape of a teepee. The vines grow vigorously so do not have more than three plants to a pole or four to five to the teepee. Tie the runners loosely to the pole and keep the soil well cultivated.

*KENTUCKY WONDER or Old Homestead.

Moderately branched, good climbing plant of medium height. Pods scimatar curved, extremely brittle. An excellent bean for canning and recommended for quick freezing. Seed brown. Length of pod, 8 inches; height of plant, 5 feet; days to maturity, 65.

SCARLET RUNNER (Flowering Beans). Used either for ornamental purposes or green shell and snap beans. Flowers are bright scarlet. Splendid for covering trellises or fences. Pods are broad, flat, deep green. Seed purple mottled violet. Length of pod, 5 inches; height of plant, 12 feet; days to maturity, 65.

LIMA BEANS

Bush Type

BURPEE'S BUSH LIMA. Plant large, thick stemmed with occasional runners. Shell pods dark green, of smooth surface moderately curved, flat, uniform in size. Very large for dwarf limas. Seed greenish white. Length of pod, 4 inches... height of plant, 19 inches; days to maturity, 75.

*HENDERSON'S BUSH LIMA (Baby Lima).
Small plant, slender stemmed, very erect, bushy, very early, long in bearing. Pods in numerous clusters close to center of plant.
Especially adapted to West and Middle West.
Seed white. Length of pod, 3 inches; height of plant, 12 inches; days to maturity, 66.

SPECKLED BUSH LIMA. One of the hardiest, and a sure cropper. Pods rather short and flat. Seed mottled. Length of pod, 3 inches; height of plant, 14 inches; days to maturity, 67.

*FORDHOOK BUSH LIMA. Vines strong, erect, keeping bean pods off the ground. Bears immense crop of large pods, which contain three to five beans. Seed white. Length of pod, 4 inches; height of plant, 15 inches; days to maturity, 75.

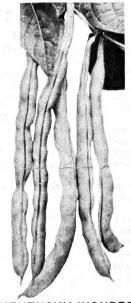
Pole Type

CHRISTMAS or LARGE SPECKLED LIMA. A long season variety, producing extra large beans of green and mottled red Christmas colors. Height 7 to 9 feet, pods 5 to 5½ inches long with three seeds. Days to maturity, 90.

KING OF THE GARDEN LIMA. Largely grown and a valuable general purpose bean. Plant much branched, late, long-bearing. Seed white. Length of pod, 4 inches; height of plant, 5 to 8 inches; days to maturity, 88.

SMALL CAROLINA or SIEVA. Small type of pole lima, good winter bean, matures quickly, and is very productive. Green shell beans of excellent quality. Seed white. Length of pod, 3 inches; height of plant, 5 to 8 feet; days to maturity, 76.

POLE SPECKLED LIMA (Florida Butter). Vine heavy, bears profusely through season. Small beans, are of good quality either in green or dry state. Seeds buff mottled with brown. Length of pod, 3 inches; height of plant 5 to 8 feet; days to maturity, 77.



KENTUCKY WONDER

All Packets 10c

See page 17 for Vegetable Seed Prices.



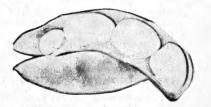
BURPEE'S STRINGLESS GREEN POD

DRY EDIBLE BEANS

WHITE NAVY. The long-time standard white cooking bean. Plants 16 to 20 inches high with tendency to vine. Pods tough and stringy. Seeds small, rounded oval, white. Days to maturity, 93.

GREAT NORTHERN. Similar to White Navy but seeds are larger. Days to maturity, 90.

PINTO. Colorado Pinto Bean is grown extensively in mid-western states and has a definite place in the shell bean market. Dwarf plants that stand a lot of dry weather. Beans flat, oval, mottled light brown.



BURPEE'S BUSH LIMA

WHERE?

First of all, the garden must be in the open where it can get sunlight at least six hours a day. Vegetables cannot be grown in the shade.

The plot must be well-drained, not subject to excess water.

The convenience of the garden location is more important than might be supposed. The garden should be as close to one's home as a suitable place can be found, because a garden needs some attention almost daily.

A rich, deep, friable sandy loam free from debris is the best all-purpose garden soil. Un-

less a soil is of such character that it can be spaded up in the spring into a loose crumbly condition, it will be difficult to work if not definitely unsuited to vegetable growing.

The town gardener takes what he can get, removes the stones or trash and does the best he can with it. If the soil is well drained and produces a rank, quick growth of weeds or grass, it probably can be developed into a good garden.

Fertilizers and soil conditioners are a big help.



TABLE BEETS

Packet 10c

Planting Instructions: Garden Beets. Even the beginner can grow good They do best in rich sandy Sow in rows 14 to 18 inches loam. apart, space about one inch apart in the row. As beet seeds are slow starters it is a good plan to mix some radish seed with the beet seed. This marks the row and when you pull the radishes you leave space for the beets. Start thinning when plant are 4 to 6 inches tall. The pulled beet plants may be transplanted elsewhere or eaten as greens.

Beets will tolerate frost and can stand in the garden until the approach of hard freezing. They should be harvested when about 2 inches in diameter. Garden beets are generally dam-

aged little by insects.

EARLY BLOOD TURNIP. Very early, fine quality, sweet and tender. Good for home and market garden and for canning. Excellent for winter storage. Roots globular with small tap root, flesh dark red with indistinctive lighter red zones. Days to maturity, 55.

EXTRA EARLY EGYPTIAN. Beet is small, but is exceptionally early. Dark red in color, flesh zoned a lighter shade or a shade of pinkish white. Days to maturity, 50.

or a shade of pinkish white. Days to maturity, 50.

DETROIT DARK RED. It has a round, somewhat oval root, very smooth, and a fine, deep blood-red color. The flesh is bright red and tender. Days to maturity for the shade of the

is bright red and tender. Days to maturity, 55.

EARLY WONDER. One of the earliest beets. Tops medium small, erect with small collar or crown. Roots blood red, flattened globe with small tap root. Flesh purplish red zoned lighter shades. Days to maturity, 50.

SWISS CHARD BEET. Only the tops of this beet are used, like spinach. Stalks and mid-ribs may be prepared like asparagus. Days to maturity, 50 to 55.

MAMMOTH LONG RED MANGEL. Roots

paragus. Days to maturity, 50 to 55.

MAMMOTH LONG RED MANGEL. Roots
attain an enormous size, are smooth,
uniformly straight and thicker than the
common varieties. Flesh is rose and
white. Fine for stock feeding. Days to maturiyt, 105.

BROCCOLI

Packet 10c

It's rather new in this country but now very popular. Well adapted to home garden and is grown essentially the same as cabbage. Plants can be grown for transplanting like cabbage, or the seeds for a late crop can be planted in place in the garden. By this method four or five seed in spots at 18-inch intervals in rows and later thinned to one plant.

ITALIAN GREEN SPROUTING. tinct variety for the home garden. Plant forms a central head, fairly compact cluster of flower buds resembling cauliflower, except that it is green in color.

BORECOLE OR KALE

Packet 10c

Planting Instructions: Given about the same treatment as late cabbage. Sow seed 1/2 inch deep in rows 2 feet apart, and thin to 18 to 24 inches apart in the row. Extra hardy varieties may be sown in September and wintered over.

DWARF GREEN. Grows 16 to 20 inches high, can be used as a vegetable or for ornamental flower beds. Sown in spring. Days to maturity, 55.

Brussell Sprouts

Packet 15c

Definitely a cool season crop, plants are hardier than cabbage and cultivated in the same way. The larger lower leaves should be removed to make room for the heads, but the top leaves should be left. Days to maturity, 60.

CABBAGE

Packet 10c

Cabbage is a cold weather plant and does best in spring and fall. Prefers moist soil. For spring cabbage, plant early maturing varieties and use when heads are well formed and solid. Several varieties mature in the fall and are available for winter storage. Red cabbage is very popular with some and grown the same as other late varieties.

Cabbage is started by sowing in hot beds or cold frames about two months ahead of time to set outdoors. To get the best plants transplant once before setting out in the field or garden.
Set the plants 2 feet apart in 3-foot

rows or a little closer for early cabbage. Cultivate thoroughly as long as possible without injuring the plants. cabbage can be successfully irrigated but not after the heads are well start-

Watch for insects. The leaf eating bugs and worms should be dusted or sprayed with some stomach poison like Arsenate of Lead, Acme Duradust or D. D. T., and the sucking insects with some contact poison like Black Leaf 40. The amateur gardener will do best by spraying or dusting with some all-purpose insecticide like Acme Garden Guard or End O' Pest, which give protection against leaf eating worms and insects and sucking insects. Start spraying or dusting early but it's best to discontinue about ten days before harvest time.

See page 17 for Vegetable Seed Prices.

Early Varieties

COPENHAGEN MARKET. Very early, round headed, exceptionally large, solid and of very fine quality. Leaves are medium light green, thick and smooth. Days to maturity, 80.

Days to maturity, 80.

TRUE JERSEY WAKEFIELD. Heads evenly from latter part of June to first of July. Leaves yellow tint, stiff texture. Head very pale green; short; blunt and conical; sometimes tinged with red. Days to maturity, 75.

GOLDEN ACRE CABBAGE. Heads are round, firm, and of exceptionally fine texture. Average weight is about 4 pounds to the head. Days to maturity, 68.

DUTCH. A short-stemmed variety, well suited for market garden culture. Heads are somewhat smaller than the Early Flat Dutch. Days to maturity,

Main Crop Varieties

LATE PREMIUM FLAT DUTCH. A tall stemmed variety, rather quick to head. The leaves are large and glaucous; head is big, flattened, full and solid. Days to maturity, 115.

DANISH BALLHEAD. A sure header. The heads are round, hard, and extremely heavy. Days to maturity, 110.

Yellows Resistant Varieties

JERSEY QUEEN. Exceptionally resistant to Yellows. Heads are of conical form, with broad base and pointed top. One of the first resistant varieties to mature. Days to maturity, 70.

mature. Days to maturity, 70.

MARION MARKET. Resembles Copenhagen Market but is late in maturing. Head is nearly round, yields heavily, and is excellent for kraut. Can be grown on yellows infested soil. Days to maturity, 80.

WISCONSIN BALL HEAD. Yellows Resistant. Heads rather small but very hard. Short stem with blue-green leaves.

RED ACRE. The earliest red variety.

RED ACRE. The earliest red variety. Plants small, compact and short stemmed; heads of medium size, round, very hard and heavy, red colored throughout. A good shipper.

DRUMHEAD SAVOY. Stem 5 to 6 inches high, stout, bearing a broad, thick, compact head, which is flat on top, sometimes tinged with wine-red, and almost perfectly smooth, being only partially crimped at the edges of the leaves. Outer leaves are numerous, broad, stiff, well spread out, and dark green in color. Bears early frosts very well. Days to maturity, 110.

CHINESE OR CELERY CABBAGE

PE TSAI—Wong Bok, Pekin. About 65 days. Sow last half of July or first of August for best results in this section. When matured this plant resembles Cos lettuce more than cabbage. Used in salads or may be cooked like cabbage or asparagus. Plants should be banked as they grow, or the leaves tied up over the center to produce celery-like form. up over t

SWEET CORN

Sweet Corn requires considerable space and may be grown in almost all parts of the United States. It does well on any good garden soil.

In as much as Sweet Corn passes the peak of quality stage rather quickly, it is desirable to make successive plantings. The sugar content of green corn decreases very rapidly after harvest, thus freshly gathered corn is much superior. If you have never eaten Sweet Corn that was cooked immediately after gathering, you've missed a real treat.

One of the enemies of Sweet Corn is the Corn Ear Worm. To combat this, dust the silk with a 5% D. D. T. dust. Do this two or three times.

Or mix $\frac{1}{4}$ pint of 25% D. D. T. emulsiable solution with two pints of white mineral oil (40 to 90 seconds Saybolt Viscosity). Shake well then add water to make a total of one gallon, and spray at full silk stage.

*STOWELL'S EVERGREEN. This is the standard main crop variety. It is exceptionally tender and sugary. Length of ear, 7½ inches; number of rows, 14-20; days to maturity, 94.

COUNTRY GENTLEMAN (Shoe Peg). Ears large, kernels small but deep and without any row formation. It matures late. Length of ear, 8 inches; days to maturity, 90.

EXTRA EARLY ADAMS. The very earliest. Ears 6 to 7 inches long, slightly tapered, 10 to 14 rows of creamy white kernels of good quality. Days to maturity, 71.

TRUCKER'S FAVORITE. Ears 8 to 9½ inches long, cylindrical with 10 to 16 rows of medium deep, ivory white kernels of medium depth and good quality. Days to maturity, 84.

*GOLDEN BANTAM. Yellow. Rather early variety very tender and sweet

*GOLDEN BANTAM. Yellow. Rather early variety, very tender and sweet, with rich flavor. Matures early and is comparatively free from worms. Length of ear, 6½ inches; number of rows, 8; days to maturity, 78.

HYBRID SWEET CORN

Hybrids are tailor-made, and therefore an improvement on the open pollinated varieties. But select the varieties that do best in your locality. The best ones are superior in yield and quality. Do not save the seed of hybrids for planting. The seed is no longer a hybrid and will not come true.

YELLOW

*GOLDEN CROSS BANTAM (Yellow). Matures about 8 to 10 days later than Golden Bantam. Length of ear, 8 inches; number of rows, 12; days to maturity, 82.

MARCROSS. An early, large eared, wilt resistant market hybrid. Rows are straight, fairly well filled tips and heavy husk coverage. Plants are 5-5½ feet and well rooted. Length of ear, 7-7½ inches; number of rows, 10-14; days to maturity, 72.

CARMEL CROSS. Large gently tapering eared, wilt resistant, early market yellow hybrid. Length of ear, 7 inches; number of rows, 12-14; days to maturity, 78.

turity, 78.

ILLINOIS No. 10. A vigorous, drought resister, tolerant to short days and cool weather. Stalks 7 feet tall, ears 8 inches long with 12 to 16 rows. Kernels golden color, fairly tender and sweet. Days to maturity, 80.

IOCHIEF. All American Selection Gold Medal 1951. Very productive, drought resistant, vigorous, with very few suckers. Stalks 6½ feet tall, ears 8½ inches long with 14 to 18 rows. Kernels bright golden yellow, deep, tender and of fine flavor. Days to maturity, 83.

IOANA. An All American. The delicious flavor makes Ioana very popular. Ears about 8 inches long with 12 to 16 rows of deep, rather narrow, light yellow kernels. Days to maturity, 87.

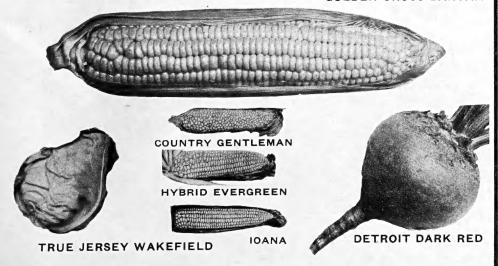
TENDERGOLD. Somewhat earlier than Golden Cross Bantam. Ears nearly cylindrical, 134 inches in diameter with 12 to 16 rows of tender, golden yellow kernels. Days to maturity, 81.

WHITE

*HYBRID EVERGREEN (White). Plant similar to Evergreen, but more tender. Grains semi-narrow, plant dark green. Length of ear, 8 inches; number of rows, 12-16; days to maturity, 90.

HYBRID COUNTRY GENTLEMAN. Retains all the good quality of this long time favorite but is more productive and more resistant to drought. Days to maturity, 98.

GOLDEN CROSS BANTAM





Undoubtedly some garden soils are so rich as to need no fertilizer, but these are exceptions. Vegetables do best when well fed and this means fertilizers. Manure is always a good garden fertilizer, but is not available for all farm garden and very inconvenient to obtain for city gardens.

Some vegetables do best when more than normal quantities of certain fertilizing elements are applied. For instance, leafy crops like spinach, cabbage and lettuce often require higher percentage of nitrogin while root crops such as beets, carrots, etc., need a higher percentage of potash.

For all practical purposes a good 5-10-5 commercial fertilizer such as Vigoro or Vertagreen will satisfy the needs of most vegetables, flowers and grasses.

An excellent way to apply a 5-10-5 fertilizer is to broadcast it evenly over the garden at the rate of three pounds per 100 square feet and rake or harrow it into the top 3 or 4 inches of soil, or it can be side dressed alongside the rows. With this method a pound should treat about twenty feet of row. Do not let the fertilizer come in direct contact with the plants and stir it into the soil.

There are now a number of concentrated soluble fertilizers which are very effective plant boosters. These are mixed with water and the solution is applied at the base of the plants. These are also sprayed on the leaves for leaf feeding, but root feeding seems the more natural process.

Your Garden Can Be Beautifu

In thinking of "beauty in the garden," we naturally think of flowers, but a vegetable garden can be beautiful, too.

First of all, don't make your garden too large, in other words, don't bite off more than you can chew.

can chew.

Lay it out carefully, keep the rows absolutely straight. If a planter is used, the first row should be marked off with a line to get it straight, and after that the marker on the planter will enable the operator to make straight rows. If the garden is planted by hand, a line should be used to get the rows straight. Set a stake at each end and tightly stretch a cord over the row. Rows should be marked off in some convenient way to open up a shallow trench in which to plant the seed. If many rows of the same width are to be planted by hand, it will pay to make a hand marker about four rows wide. Then the first row can be marked by a line and the others made by keeping one foot of the marker in the last row, marking three rows each time.

A marker can be made quickly and cheaply

last row, marking three rows each time.

A marker can be made quickly and cheaply by taking a piece of board or "2 by 4" long enough to cover the four rows, and nailing four legs onto it at the distances wanted between the rows. The legs should be about 4 inches wide and rounded or bluntly pointed at the lower end to mark off the rows. A handle should be nailed and braced to the cross-piece and be long enough so the operator can walk in front of the marker. Different row widths can be had by changing the position of the legs on the cross-piece. This simple outfit is a time saver and convenient to use.

A small, clean garden, free of weeds, will

A small, clean garden, free of weeds, will give you much more pleasure and much greater satisfaction than a large one in which the constant fight to keep ahead of the weeds, becomes a nightmare.

Follow the idea of contour farming by making your rows across the natural flow of water. If your garden slopes in more than one direction, lay out your rows accordingly. Don't let the water flow down the rows.

CARROTS

Carrots are a common root crop and a "must" in every garden as they rank high in vitamin food value. They are hardy and are relatively free from insect and disease troubles. For early use sow seed as soon as the ground can be worked in the spring and follow by successive plantings to provide young carrots throughout the season. If carrots are allowed to mature and stay in the ground they become woody and are not so palatable. A planting should be made in the summer, the time to be governed by the climate, to provide plenty of roots to store for winter use.

The seeds are difficult to plant without getting them too thick. They should be sown in drills and thinned to 2 inches apart in the row before the plants are 6 inches high. The first thinning may be to half this distance and the final thinning done later when the young carrots are large enough to use. Seeds should be covered about half an inch. Rows in the farm garden should be at least 2 feet apart to allow for easy cultivation. In small gardens for hand cultivating or under irrigation, the rows may be as close as 12 inches if the soil is fertile. There are few insect and disease troubles with carrots.



DANVER'S HALF LONG

IMPERATOR. All American Selection 1933. Seven to 8 inches long, deep orange colored throughout, brittle, and sweet, has practically no core. Days to maturity, 72.

maturity, 72.

*CHANTENAY or MODEL, It is delicate in flavor, juicy and sweet. Largely planted as a medium early variety, Days to maturity, 70.

DANVER'S HALF LONG. Fine for table use and best of all for the stock breeder. It is a slender half-long root, very well colored, and has a blunt end. Days to maturity, 75.

IMPROVED LONG ORANGE. For stock feeding and table use. Root is pale orange on the underground portion, and green above ground. It is a good keeper. Days to maturity, 80.

*RED CORE CHANTENAY. A fine early half-long stump-rooted carret. Color

half-long, stump-rooted carrot. Color deep orange red, core of deeper color. Roots 5 to 6 inches long, 2 to 2½ inches thick at the crown. Days to maturity,

ANTES HALF LONG, STUMP ROOT-ED. The flesh is orange red, fine grained. Roots grow from 6 to 7 inches long, holding their thickness through-out the entire length of the root and end abruptly into a thin, small tail. Days to maturity, 70.

CAULIFLOWER



EARLY SNOWBALL NO. 16

Planting Instructions: Clean and thorough cultivation is absolutely essential. Hoe right close to the plants, giving shallow cultivation as they expand. The "heads," to be kept white and tender, must be protected from the sun soon after they begin to form by tying the leaves together over them. The seed is sown in April for an early crop and in July for a fall

*EARLY SNOWBALL No. 16. Very early. Produces a very large compact head which is snowy white, which forms quickly and will not discolor easily. Finest on the market. Days to matur-ity, 55. Pkt., 25c.

ity, 55. Pkt., 25c.

*MOUNTAIN SNOWBALL. This variety is considered one of the very best for outdoor culture. It will withstand weather conditions that are utterly ruinous to the Erfurt strains. Days to maturity, 58. Pkt., 25c.

CELERY

Packet 10c

Planting Instructions: For this climate sow celery in May or early June, in drills 4 to 6 inches apart and cover about 1/4 inch deep. When ready to transplant thin out to 2 or 3 inches apart in the row, and leave growing until July or August when they should

be planted in rows 18 to 20 inches apart and set 6 inches in the row. In planting, press the ground around the plants but do not let any earth get into the heart.

SELF-BLANCHING GOLDEN

GOLDEN SELF-BLANCHING. Half dwarf, compact with well developed leaves. It needs very little blanching to fit it for the table. Days to maturity, 125. Pkt., 10c.
GIANT PASCAL. A very vigorous and an extremely productive variety, with short, broad, thick, tender and fleshy green ribs, which blanch very readily when earthed up. It keeps very well under cover during winter. Days to maturity, 135. Pkt., 10c.
WHITE PLUME. This variety is characterized by the silver-white color with which its leaves are partly tinged at first. It suffers easily from the cold and should be grown for autumn rather than for winter use. Days to maturity, 120. Pkt., 10c.
Celeriac or Turnip-Rooted Celery. Planting Instructions: Sow the latter

Planting Instructions: Sow the latter part of April, covering seeds 14 of an inch. Thin out to about 1 inch apart in the row and transplant into rows 1½ feet apart and 6 inches apart in the row.

Uses. Served as a salad with French dressing, or served hot with cream

Roots are turnip-shaped, very smooth, tender and marrow-like.

COLLARDS

GEORGIA SOUTHERN or

GEORGIA SOUTHERN or CREOLE. Forms a large, loose, open head, or mass of leaves on tall stem. Days to maturity, 90. Pkt., 10c.

CORN SALAD Broadleaved. Used as a salad. Seeds are sown late in August or in autumn in any soil. Plant produces leaves from October until spring without requiring any attention or protection. Pkt., 15c.

GARDEN CRESS. For Garnishing. Crisp, pungent leaves used as a condiment and for garnishing. Sow in a moist and shaded position to obtain more tender and more abundant leaves. Pkt., 10c.

VATER CRESS. Does best when grown along moist banks or in tubs in water-covered soil. It is one of the most delicious of small salads and should be planted wherever a suitable place can be found. Pkt., 15c. WATER CRESS.

EARLY FORTUNE



See page 17 for Vegetable Seed Prices.



SPADE SCIENTIFICALLY

First of all, take it easy. Spading is one of the first jobs in the spring and comes when you are soft. Therefore, take a little at a time. Don't overdo it.

Don't spade when soil is wet. The usual test is to squeeze a handful of soil. If it forms a ball that does not crumble, it is too

Dig one trench across the end of the garden. Spade the bottom of that trench without removing any more of the soil.

Then spade with the blade at right angle to the trench. Lift the soil and upside down in the trench just dug. Then spade the bottom of this second trench without removing more soil and proceed as before. When you get the last soil dug you will need to bring the soil dug from the first trench to fill the last trench. This results in a good, deep, well spaded soil.

After spading, this soil should be hoed and raked thoroughly to make a fine, smooth seed

CUCUMBERS

Packet 10c, except when priced.

Planting Instructions: Cucumbers will grow in almost any soil that has good drainage but do best in warm light soils. When all danger of frost is past plant 8 to 10 seeds about ½ inch deep in hills about 4 feet apart. When the plants have made good growth thin to about three or four seeds to the hill. Earlier crops may be had by starting the plants in a hot bed and transplanting when danger of frost is past, or by planting early and keep the young plants covered with Hot Caps.

Keep the soil well fertilized and well cultivated between the plants until the plants cover the area, then hand weed if necessary. Cucumbers need plenty of water.

Plants should be dusted with some arsenical or other insecticide to kill leaf-eating insects and sprayed with Black Leaf 40 to get the aphids. A liberal dusting with Garden Guard will take care of both classes.

- HYBRID CUCUMBER. Unequaled for size, shape and quality. Vines are very vigorous and bear for a long time. This results in large yields. One grower reports that he picked 728 good cucumbers from seven plants. Try it this season. Pkt., 30c; 1/4 oz., \$1.50; 1/2 oz., \$2.50; oz., \$4.50.
- DAVIS PERFECT. Slim in shape, 9 inches long, dark green color changing to white. Very crisp. Days to maturity. to white.
- ity, 65.

 IMPROVED LONG GREEN. The most popular for general use. The flesh is thick, firm and crisp. The fruit is slender, about 10 to 12 inches long, and remains dark green in color until ripe. Days to maturity, 68.

 THE BARTELDES CUCUMBER. Winner of "Award of Merit" in the All American Selections of Vegetables for 1934. Description: Often called Barteldes Long Green in the South. A fine white spine variety, smooth dark green wax-like outer skin, crisp white flesh. Size 10 to 12 inches long by 3 inches thick. Particularly valuable to the shipper and market gardener because it keeps its color and fresh appearance long after it is picked. Days to maturity, 65.

 CUBIT. Same type as Colorado but with
- CUBIT. Same type as Colorado but with straight sides and round ends. Dark green color. Length 8 inches. Small seed space. Days to maturity, 70.
- ALMETTO. A downy mildew resistant variety developed for the South. Cucumbers dark green, 8 inches long, 2½ inches thick, small seed area and slightly pointed ends. PALMETTO.

- EARLY FORTUNE. Vines make a strong growth, producing abundant crops of fruit, slightly pointed, with a very dark green skin, and retains its color much longer than most other sorts. Days to maturity, 63.
- PRICKLY or WEST INDIAN GHERKIN.
 A creeping and very branching plant.
 Fruit is oval, green, with white longitudinal streaks, turning pale yellow when ripe. When ripe is about 3 inches long and over 1 inch in diameter. Days long and over 1 inch in diameter. Days to maturity, 60.
- STRAIGHT EIGHT. A Gold Medal Winner in 1935. One of the best for slicing. About 8 inches long and 1½ inches in diameter, straight and symmetrical. An excellent size for slicing and of a deep green when ready to use. Days to maturity 66 turity, 66.
- COLORADO (A&C). Fruits 9 to 11 inches long, slight taper at both ends, dark green, and hold up well in shipping. Days to maturity, 66 to 68.
- NATIONAL PICKLING. One of the best all around pickles. Pickles are dark green, cylindrical, and blocky at both ends. Days to maturity, 55.
- ARKETER. A dark green cucumber about 8 inches long, 2¼ inches thick and tapering slightly toward each end. MARKETER. Flesh is crisp and seed cavity small. Fine for home use, market and shipping. Days to maturity, 65.

EGGPLANT

Packet 10c

Planting Instructions: Sow in hotbeds very early in the spring; thin them out as soon as big enough to be handled to 3 to 4 inches each way and transplanted to 2 to 3 feet apart in very rich, warm ground. Do not plant them outside until the nights are real warm, as the least frost will, if it does not kill them, check the growth.

FORT MYERS MARKET. purple and long and oval. Very smooth skin and quite resistant to disease and heat. Days to maturity, 80.

heat. Days to maturity, 80.

BLACK BEAUTY. The fruits set freely and develop quickly, so entire crop can be harvested before frost. They are large, thick, lustrous purplish black. Days to maturity, 90.

NEW YORK IMPROVED Large Purple Spineless. Stem stout, not very tall, usually branching and of gray-green, slightly or not at all tinged with purple. Fruit is very large, of a short pear shaped and slightly flattened at both ends. Days to maturity, 92.

BLACK BEAUTY



ENDIVE

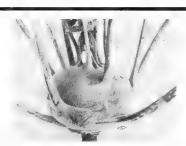
Packet 10c

Planting Instructions: Same as Lettuce. Fine salad plant. Also used as "boiled Greens." Can be grown the Can be grown the year round. To blanch, tie the leaves together two or three weeks before gathering.

- BROAD LEAVED BATARIAN. Bright green leaves which are broad, twisted and waved. White midribs. Crisp and tender. Used in soups, stews and salads. Days to maturity, 90.
- GREEN CURLED. Best for general use. Leaves finely cut, having a mossy ap-pearance. Pungent flavor. Days to maturity, 94.
- FLORIDA DEEP HEART. An improved variety with larger leaf, broader, thicker and well branched heads, earlier in maturity. Upright growth with dense mass of thick slightly crumpled leaves. Favored by market gardeners and shippers. and shippers.

GARLIC

The root, or bulb, is composed of many small bulbs called "cloves," which are planted in the spring 6 to 8 inches apart, and in August the bulbs are ready to gather. Lb., 75c.



KOHL-RABI

Packet 10c

Planting Instructions: Sow in the spring in rows 3 to 8 inches and afterwards thin out to 8 to 10 inches in a row. One ounce will produce 2,000 plants.

When used for the table it should be cut when quite small as it is then very tender and delicate, having the combined flavors of the cabbage and turnip.

ARLY WHITE VIENNA. The ball forms quickly in this variety and is ready to be eaten about two months from time of sowing. Days to maturity of the control of EARLY

See page 17 for Vegetable Seed Prices.

CULTIVATE

Cultivating is done for two purposes. 1-To keep the weeds out. 2-To keep a dust mulch which conserves moisture.

Weeds rob the cultivated plants of water, plant food, and even space, and light.

If the garden is cultivated once a week, especially during the early part of the season, weeds will be controlled, and the crops will get the benefit of the moisture and soil fertility.

Do not cultivate when soil is wet but work soil thoroughly as soon as possible after each rain or irrigation. This prevents crusting, and keeps the soil loose to conserve moisture and to readily absorb the next rain.

The cultivation should be shallow to avoid injuring the vegetable plant roots that lie near the surface. Many gardeners use a "Pull Hoe Weeder" which slips along just under the surface.



LEEK

Packet 10c

Planting Instructions: It may be sown in drills or broadcast. When the plants are 6 inches high, transplant into rows about a foot apart, setting the plants 4 or 5 inches deep and about 6 inches apart in the rows.

LARGE LONDON or SCOTCH FLAG. Long, broad stems, leaves are rather dark green color, rather early and a very productive variety.

Mustard Spinach

Packet 10c

TENDERGREEN. A quick growing plant similar to foliage turnip but producing a crop of leaves in much shorter time. Carliest and quickest growing green, ery popular everywhere. Days to ma-Earliest turity, 28.

MUSTARD

Packet 10c

Planting Instructions: Mustard greens or mustard spinach is an acceptable substitute for spinach and can usually be depended upon for satisfactory growth, even in poor soil. The seed should be sown as early in the spring as possible, or if wanted for a fall crop, in late July or early August. In the South the crops are often started in the fall for early spring salad. Seed is sown in drills about 12 inches apart, and the plants thinned to 5 or 6 inches in the row. Mustard has an especial appeal for the home gardener who has a fondness for "greens."

SOUTHERN GIANT CURLED. Leaves are twice the size of the ordinary White Mustard and the flavor is sweet. Days to maturity, 35.

CHINESE. Very hardy. A large plant, leaves are often 14 to 16 inches long, with the edges often turned underneath. The leaves are eaten like spinach. Days to maturity, 40.

FLORIDA BROAD LEAVED. Exceptionally large, thick, bright greet smooth leaves with toothed edges; quick grower. Days to maturity, 40.

OKRA OR GUMBO

Packet 10c

The young green pods are used in soups or stews, or in the South as a separate side dish. They impart a rich flavor to soups.

Planting Instructions: Sow late in the spring, after the ground has become warm, in drills 3 feet apart, and when the plants are 3 inches high thin out from 10 to 12 inches. They should be well manured. They also can be started in a hotbed and transplanted afterwards.

afterwards.

EARLY DWARF PROLIFIC. It is a small fruited sub-variety of the Long Green Okra, but is earlier and more productive. The pods are very short. Days to maturity, 60.

WHITE VELVET. Distinctly unlike other varieties in that the pod is perfectly smooth and round. They are of attractive appearance and superior flavor and tenderness. Pods are of extra large size and produced in great abundance. Days to maturity, 65.

CLEMSON SPINELESS. A uniform, spineless strain of Perkins Long Podded type. Days to maturity, 50 to 55.

PERKINS MAMMOTH TALL GREEN. Pods bright, deep green, slender and meaty. Plants 5 feet tall, pods 7 inches long. Days to maturity, 56.

EARLY DWARF PROLIFIC

EARLY DWARF PROLIFIC



LETTUCE

Packet 10c

Planting Instructions: Lettuce should be in every garden as it is the most commonly grown salad crop. It prefers a rich, mellow, sandy-loam soil and does its best in the cooler parts of the gardening season. To have lettuce crisp and at its best, the growth must be rapid. To get this the plants should have plenty of moisture and fertilizer. Seed may be sown broadcast but the best way is to sow in rows about 1 to 2 feet apart. When the plants are up, thin to about 6 to 12 inches apart. It is best to make small but frequent sowings so that you will have fresh plants coming along during the season. Insects do not bother lettuce to any etxent in the home garden.

LOOSE LEAF VARIETIES

OAK LEAF. Distinct because the deeply lobed leaves resemble oak leaves. Plants are medium large with thick, succulent, tender leaves. A fine home garden variety.

GRAND RAPIDS (Black Seeded). The "West leaf lettuce to sow outside for the summer market, and recommended for family use. It does not form a head but produces beautiful, long, curly and wrinkled leaves. Days to maturity, 45.

BLACK SEEDED SIMPSON. Plant is compact and consists of a firm, well blanched, rounded to elongated and V-shaped cluster of leaves, closely drawn together. Days to maturity, 40.

EARLY CURLED or WHITE SEEDED

EARLY CURLED or WHITE SEEDED SIMPSON. Plant spreading and forming a rounded to low V-shaped, well balanced, dense cluster of leaves. Days to maturity, 40.

HEAD LETTUCE

ICEBERG (White Seeded). A curled heading medium large, crisp, green variety, edges fringed and tinged with brown, a sort having outer leaves of strong ribs enclosing an exceedingly crisp, white interior. Days to maturity, 60.

EARLY PRIZE HEAD (White Seed). Forms a large, tender, crisp, loose head, bright green crimpled leaves tinged with red. Days to maturity, 45.

MAY KING (White Seed). The best But-

MAY KING (White Seed). The best Butterhead letture for forming as well as early spring planting in the open ground. It is extremely hardy, and therefore can be planted very early. Days to maturity, 60.

See page 17 for Vegetable Seed Prices.

NEW YORK or WONDERFUL (White Seed). A very crisp variety, strictly cabbage-heading, very large, late, extremely slow to seed. Leaves blistered, crumpled and twisted. Days to maturity 75 ity, 75.

NEW YORK NO. 12. An early improved strain of New York for spring and summer. It is a well bred selection of this famous lettuce, being lighter in color, more desirable for general planting. Days to maturity, 73.

GREAT LAKES LETTUCE. type that really stands up and produces heads in hot weather. Heads are large, deep green, with thick crisp leaves. Resistant to tip burn. Can remain in the field longer than other varieties before cutting. Days to maturity, 86.

IMPERIAL 847. Heads are medium large and solid. Does fairly well in hot weather and is resistant to tip burn. Black seeded. Days to maturity, 85.

IMPERIAL 44. Heads medium large, slightly flattened and compact. Days to maturity, 82.

BIG BOSTON (White Seed). A splendid shipper, sure header, reliable and hardy, and is a good late summer or autumn variety. Days to maturity, 70.

HANSON (White Seed). Plant spreading, but not loose in habit and forming a globular, extremely hard, well defined, well branched head, with leaves blistered, crumpled and twisted. Days to maturity, 65.

WATERMELONS

Planting Instructions: The same as for Muskmelons, except that they should be planted from 8 to 10 feet apart each way.

- NEW HAMPSHIRE MIDGET. 1951 All American Gold Medal Winner. A very small, extremely early maturing oval melon. Under favorable conditions it ripens in 65 days, and therefore very desirable for short growing seasons. Light or grey-green in color with narrow, irregular markings, average weight 2½ pounds, diameter 6 inches, with red flesh and very thin rind. Flesh solid and sweet. Seed black.
- IRISH GRAY. Free from hard centers and strings, very firm, and does not break when sliced. Greenish gray color; does not sunburn. Seed white. Days to maturity, 90.
- TOM WATSON. Immensely popular because there is delicious sweetness. The flesh is rich red, crisp and tenderly melting. Reaches the size of 24 to 28 inches in length, and 12 to 14 inches in diameter. It has a mottled, dark green rind, thin, but tough enough to stand shipping. Seed white, spotted with brown. Days to maturity, 90.
- KLECKLEY SWEET. Well named, for the flesh of this melon is as sweet as honey. The rind is dark green, and only about one-half inch thick. Seeds are white, lying close to the rind, leaving a large solid heart. Days to maturity, 86.
- KLECKLEY NO. 6. A wilt resistant variety of high quality developed by Dr. I. J. Wilson at the Iowa Experiment Station. Same type as Kleckley Sweet with same high sugar content. Days to maturity, 88.
- **EARLY KANSAS or RED RUSSIAN.** Fruits large, oval, striped, with bright red flesh. Very sweet and of fine flavor. Rather hard shell makes it a good shipper. Seed reddish brown. Days to maturity, 82.
- STONE MOUNTAIN. The fruits frequently weigh 50 to 80 pounds. The flesh is solid, bright scarlet in color, has few seeds, and is very sweet. Seed white. Days to maturity, 88.
- STONE MOUNTAIN No. 5. A wilt resistant strain.
- "KING AND QUEEN" WINTER WATERMELON. Spherical in shape, ivory shell, pink center. Average weight 25 pounds. The most luscious, handsome, and valuable winter watermelon in the world. Seeds black. Days to maturity, 85.
- PIE MELON. Kansas Stock Pie Melon or Colorado Preserving Melon. A boon to the dry land farmer. The melons grow to a large size, some of them weighing as high as 60 to 70 pounds. The flesh is firm and solid with few seeds. Will keep all winter and can be fed to stock the same as turnips and beets.
- FLORIDA GIANT or BLACK DIAMOND. Very popular throughout the Central West and southern districts. Makes a vigorous vine growth, does not sunburn as easily as many varieties; develops unusually attractive enormous fruits. Fruit large oval shape, very dark green color with blush bloom; flesh bright red and of very sweet delicate flavor. Seeds dark brownish black. Days to maturity, 95.
- IXIE QUEEN. Flesh is bright red, rind thin, but tough; heavy yielder. Outer skin is light green splotched and striped with dark green. White seed Days to maturity, 85. DIXIE QUEEN.
- LONDIKE. A wonderful variety for local markets. Fruit is oblong, 16x10 inches, and weigh about 25 pounds. Flesh is deep red and the rind is dark. Sweet and firm. Days to maturity, 85.
- Striped Klondike. Similar to Klondike except rind has irregular dark green green stripes on light green gackground.
- NORTHERN SWEET. Sometimes referred to as Ice Box Melon. Melons small, nearly round, medium green with dark green stripes; rind very thin. Flesh deep red, crisp, sweet and of good flavor. Seeds light brown with darker
- SWEETHEART. Vine vigorous and productive. Fruit large, rounded or slightly oblong; skin pale green, with bands of deeper color, flesh red, melting and very sweet. Seed black. Days to maturity, 89.



See page 17 for Vegetable Seed Prices.

FLORIDA GIANT or BLACK DIAMOND ICEBERG. White Seed BLACK SEEDED SIMPSON

EARLY KANSAS



Watering

For best results, a garden should have moisture equal to about an inch of rain a week.

But remember, too much water is just as injurious, if not more so, than too little. Do not apply water until needed, but then do a thorough job. The water can be applied with a lawn sprinkler or can be applied by the irrigating method which flows

the water along the rows. Soil soakers are excellent for watering rows of vegetables.

A good soaking about once a week under normal conditions is sufficient and very, very much better than more frequent light sprinkling.

TRY THIS

In watering your vegetables or flowers once every two or three weeks, add two level teaspoonfuls of Ra-Pid-Gro to each gallon of water. Apply with a sprinkling can and the results will amaze you.



Mulching

Mulching is for two purposes. 1-To conserve the moisture in the soil and "To keep down the growth of weeds."

Peat Moss is in our opinion the best material for mulching. Other materials such as straw, dried lawn clippings, leaves or similar material can be used very effective-

The mulch should be applied between the rows and around the plants early, before the soil dries out. Such mulch is valuable, too. around non-staked tomatoes, cucumbers and bush squash plants to keep the fruits from contact with the soil, thus keeping the fruit clean.

The mulch should be of only medium depth after it has settled down, about 2 inches. A very deep, or thick much may defeat its purpose by absorbing the water from any light rain before it reaches the soil, thus making the water shortage more acute. Mulch is harmful in rainy areas, because it keeps the soil too wet.

As a general rule, it is best to rake off the garden and compost the material rather than working it into the soil.



PARSLEY

Packet 10c

Planting Instructions: Seeds germinate very slowly, three or four weeks elapse sometimes before germination. It should be sown early in the spring, previously soaking the seed for a few hours in tepid water. Sow thickly in rows a foot apart and half an inch

MOSS or TRIPLE CURLED. In this variety divisions of leaves are deeply cut, giving the whole leaf a crimped or curled appearance. Extra fine for garnishing and culinary purposes. Days to maturity, 70.

TURNIP ROOTED. In this kind of Parsley it is not the leaves, but the thick fleshy roots which form the edible part of the plant. They are of a dingy white color, and resemble parsnips. Used mostly for flavoring soups. Days to maturity, 90.

PARSNIPS

Planting Instructions: Parsnips are grown in the same manner as Carrots, only they may be sown earlier.

HOLLOW CROWNED or SUGAR. The roots, which are creamy white, grow 10 to 12 inches long and are smooth, tender, sweet and of excellent flavor. This variety is very easily raised and is very productive. Days to maturity, 05

MUSKMELONS

Packet 10c

Planting Instructions. Muskmelons will grow on nearly any garden soil, but they will do best and mature earlier on a rich, sandy loam. The seed should not be planted until all danger of frost is past. Plant eight to ten seeds in hills about 6 feet each way, and cover to a depth of ¾ inch. After all danger of bugs is over, thin out to three or four strongest plants per hill, and cultivate until the vines cover the ground.

Green Fleshed Varieties

ROCKY FORD. It is of small size, oval shape, average weight is less than 2% pounds; skin is thin, netted, first green then a peculiar gray when ripe; flesh is pale green and very sweet. Days to maturity, 95.

HARLITY, 95.

HONEY DEW MELON. The average size is 6 to 8 inches in diameter, 7 to 8 inches in length, and weigh 5 to 6 very thick, fine-grained, and can be pounds. The flesh is emerald green, eaten to the rind. Days to maturity, 110.

EXTRA EARLY HACKENSACK. An improved and earlier variety of Hackensack. Medium size, weigh from 3 to 6 pounds, and heavily ribbed. Fine for light, warm, sandy soils. Days to maturity 88 turity, 88.

Yellow Fleshed Varieties

HALE'S BEST NO. 36. Very early. Fruit oval but quite irregular in size and shape. Flesh is salmon colored; skin is very heavily netted. Days to maturity. 85

HEARTS OF GOLD or Improved Hoodoo. Melons are of medium size, round and distinctly ribbed. Flesh is very firm, of a deep orange color, fine grained, of remarkable sweetness and juicy flavor. Days to maturity, 90.

SALMON TINTED POLLOCK 10-25. Pink meated or Salmon Tinted Rocky Ford type but considerably larger than the standard Rocky Ford. It is very rust resistant, very hardy and an excellent shipper. Days to maturity, 95.

IMPERIAL 45 or HALE'S BEST 45. Mildew resistant, oval shaped, medium size, with heavy net. Flesh deep salmon, thick and with small seed cavity. Days to maturity, 86.

QUEEN OF COLORADO. Melons are of good size, often weighing four pounds or more. Outer surface slightly ribbed covered with a gray netting. Flesh is very thick, sweet and of a deep orange color. Days to maturity, 88.

ONIONS

Packet 10c

Easy to Grow... Good to Eat ... Fine Keepers

Planting Instructions. Onions can be grown from seed, plants or sets. Sowing seed gives a wider choice of varieties, is more economical and some believe that onions grown from seed are sweeter. Onions do best in sandy loam which has been fertilized. Sow seed early in the spring in drills.

Frequent cultivation and hand weeding are both necessary because Onions must be kept clean.

For the small garden we recommend Onion Sets or Onion Plants. Mature onions from Onion Sets are the better keepers. Plant either sets or plants in rows about 14 inches apart and 2 inches apart in the row. Pull alternate plants for green onions, leaving the others to grow to mature onions.

SWEET SPANISH (Utah Strain). One of the largest and one of the best all around onions grown. Of attractive, light yellow color and a dandy shipper; flesh clear white, tender and sweet and mild flavor. Days to maturity, 110.

WHITE SWEET SPANISH. The pure white flesh of this onion is fine grained and exceptionally sweet. Days to maturity, 108.

WHITE LISBON. A very popular white bunching variety which is grown exclusively for table or green onions.

YELLOW GLOBE DANVERS. Globular shape, flesh white, mildly flavored; skin brownish yellow. Days to maturity, 112.

brownish yellow. Days to maturity, 112.

MOUNTAIN DANVERS. Considered by many onion growers as the best type of semi-globe shaped onion in existence. Small neck, bright, even color, and ripens very early; good keeper. Days to maturity, 110.

SOUTHPORT RED GLOBE. Skin is deep red and the bulbs are globe shaped, smooth surface, small neck and reach full size within 110 days. Strong flavor, very firm and superior quality. Days to maturity, 120.

LARGE RED WETHERSFIELD. Is a

LARGE RED WETHERSFIELD. Is a good drought resister. The skin is thick and of a deep red color. Days to maturity, 110. Is a

WHITE SILVERSKIN or PORTUGAL.
Bulb silvery white, flattened, and about
2 to 3 inches in diameter. An excellent medium early sort. Days to maturity, 100.

SOUTHPORT WHITE GLOBE. Bulb is silvery white, with a diameter of from 2½ to 3¼ inches, firm, and keeps remarkably well. Days to maturity, 112.

BARTELDES EARLY GRANO. This is an excellent new onion which is becoming popular wherever used. Globe type, top-shaped, of light straw color, and very sweet and mild in flavor. Days to maturity. 85. maturity, 85.

YELLOW EBENEZER. An excellent keeping, flat, mild onion. Used exten-sively for growing yellow onion sets. Days to maturity, 100.

WHITE EBENEZER. A new variety that is very similar to the yellow and promises to be very popular. Days to maturity, 100.

WHITE BERMUDA. They are called white, but really are of a pale yellow color, very large size and of extremely mild, pleasant flavor. Days to maturity, 90.

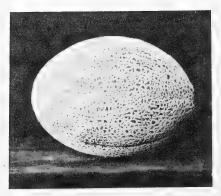
RYSTAL WHITE WAX. This is a large, flat, pure white onion, which is shipped in such large quantities from Texas each season. It matures early, is very productive, and is mild and sweet. Days to maturity, 90. CRYSTAL

ONION SETS Extra Fine

RED, YELLOW or WHITE BOTTOM SETS. Plant for spring green onions or for mature winter onions.

*

See page 17 for prices of Vegetable



HALE'S BEST 45

10



HEARTS OF GOLD





PEAS

Packet 10c



Planting Instructions: Freshly gathered, home-grown Peas are a real treat. The Pea is a cool weather plant, so make your first planting of Alaskas as soon as the ground can be worked. Follow this in about two weeks with later maturing varieties so you will have fresh garden peas over longer period.

Plant in single or double rows from 1½ to 3 feet apart, dropping a seed every inch and covering from 2 to 3 inches.

In order to encourage continuous bearing, pick the pods just as soon as they become fit to eat.

Aphids, small sucking insects, are the most common insect pests on Peas. Spray or dust with a contact insecticide containing Rotenone or Black Leaf 40.

EARLY SMOOTH VARIETIES

ALASKA Wilt Resistant. A remarkably early variety, and a good yielder. Pods round, straight and square ended, containing six light green peas. Length of pod, 2½ inches; length of vine, 2½ feet; days to maturity, 52.

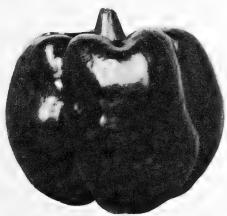
EARLY WRINKLED VARIETIES

- *LAXTONIAN. Pods averaging 4½ inches long, straight and pointed, containing seven or eight large peas. Length of pod, 4 inches; length of vine, 18 inches; days to maturity, 58.
- * Recommended for "Quick Freezing."

- PREMIUM GEM. A popular dwarf variety; pods well filled to ends; early in maturing. Length of pod, 2¾ inches; length of vine, 28 inches; days to maturity, 63.
- NOTT'S EXCELSIOR. It stands drought better than most other varieties. The vines are high and self-supporting. Length of pod, 3 inches; length of vine, 26 inches; days to maturity, 60.
- AMERICAN WONDER. Quite distinct from all other peas in habit of growth and appearance; pods are straight, well filled to the ends. Length of pod, 2½ inches; length of vine, 16 inches; days to maturity, 57.
- *THOMAS LAXTON. Very popullar, earlly, large-podded, hardy variety. Length of pod, 3l/2 inches; llength of vine, 30 inches; days to maturity, 60.
- LITTLE MARVEL. An early dwarf variety of excellent quality; extensively used for shipping and local marketing. Length of pod, 3 inches; length of vine, 18 inches; days to maturity, 60.
- GIANT STRIDE Wilt Resistant. Vines 16 to 18 inches tall, dark green with father large pods well filled with peas of excellent flavor. Matures in 74 days. Length of pod 41/2 to 51/2 inches, containing 8 to 10 peas.

MAIN CROP VARIETIES

- *TALL TELEPHONE OR ALDERMAN.
 Very robust; producing pods of very large size. Length of pod, 5 inches; length of vine, 48 inches; days to maturity, 70.
- DWARF TELEPHONE. Length of pod, 4 inches; length of vine, 2 feet; days to maturity, 74.
- EVERBEARING. Plant has a remarkable branching habit; will do well without sticks or brush. Length of pod, 4 inches; length of vine, 2½ feet; days to maturity, 73.
- LAXTON'S PROGRESS. May be planted almost as early as smooth pea varieties. Length of pod 4 inches; length of vine, 20 inches; days to maturity, 60.



BULL NOSE PEPPER

- DWARF GRAY SUGAR. A dwarf plant, producing an abundance of edible pods which are very sweet and tender. Length of pod, 2 to 3 inches; length of vine, 2/2 feet; days to maturity, 66.
- BLACK EYE RESISTANT NO. 5 OR RAMSHORN. Pods not edible. Green peas large and reach full maturity about 15 days later. Used mainly as dried peas which are good keepers. Length of pod 7 inches, length of vine 40 inches; days to maturity, 47. 1/2 lb., 20c; 1 lb., 35c.

PEPPERS

Packet 10c

Planting Instructions: They thrive best in a warm, deep, fairly moist, fertile, sandy loam, although they are often grown commercially on moderately heavy soils. They should be started in hotbeds, in February or March, and not planted outside until the soil is warm and there is no danger of frost. Set the plants in rows 2 feet apart and 18 inches in the row.

SWEET VARIETIES

- KING OF THE NORTH. Large, early and sweet. Dark green turning to rich red when ripe. A splendid short season variety. Days to maturity, 65.
- RUBY GIANT. The peppers are of very large size and so sweet and mild that they can be eaten raw. The flesh is very thick and when ripe is of a deep red color; matures early. Days to maturity, 75.
- CALIFORNIA WONDER. This new introduction of sweet pepper has strong, thick walls which are crisp and juicy. Fruits are about 4½ inches long and 3½ inches in diameter. Days to maturity, 76.
- **EARLY CALWONDER.** Similar to California Wonder but earlier and smaller.
- RUBY KING. A remarkably mild and pleasant pepper of bright red color, growing 4 to 5 inches long by about 3 inches through. The fruit is tapering or cone-shaped. Days to maturity, 70.
- LARGE BELL OR BULL NOSE. A thickset plant of light green color, branches short and stiff; fruit has four deep furrows and four corresponding ridges along the sides. Flesh is very thick with few seeds. Usually mildly flavored. Days to maturity, 60.

See Page 17 for Vegetable Seed Prices.

TRANSPLANTING



Generally transplanting retards the growth of the plant, but in many cases is desirable. Small plants of tomatoes, lettuce, beets, cabbage, and similar vegetables are easy to transplant. They withstand this rough treatment better than plants of peppers, eggplant, and the vine crops, which are commonly transplanted.

For best results, most plants for transplanting should have a mass of soil and undisturbed roots attached.

The soil of the garden should, of course, be thoroughly worked into a fine loose condition before the plants are set. In trans-

planting, the hole in the soil can be made with the hand, a peg, or a trowel, whichever is easiest; but the hole should be large enough to receive the roots and any adhering soil of the plant without crowding. Soil is then filled in around the roots and pressed down firmly to insure contact with all roots. Then water each plant to lessen the shock and draw the soil to the roots to prevent air pockets.

Muddling the plants in water to which a starter solution like "Take Hold Plus" or "Transplantone" has been added will give the plant a much better start.

RADISHES

Packet 10c

Planting Instructions: Radishes are one of the first vegetables planted in the spring and the quickest to mature. They need fertile soil, plenty of moisture and cultivation to be in best condition for eating. The seed is sown in shallow drills and successive sowings should be made at ten-day intervals. Radish seeds are often sown thinly in rows of slow germinating seed, like beets, parsnips and carrots, to mark the rows so cultivation can start before the main crops are up.



EARLY SCARLET GLOBE

EARLY VARIETIES

SPARKLER. The best of the round white tipped varieties. A very early and excellent variety both for forcing and sowing in the open ground. It is ready in about 20 days. The color is a vivid scarlet with white tip. Days to maturity, £0.

CRIMSON GIANT GLOBE. When mature they measure 6 to 8 inches in circumference, weight one ounce; their pure white flesh remaining firm and crisp, and of mild flavor. Days to maturity, 30

EARLY SCARLET TURNIP. Root very round, of very bright color; flesh white, firm, crisp. Days to maturity, 26.

EARLY TURNIP RED WHITE TIPPED. Round, red with white tip. Days to maturity, 25.

FRENCH BREAKFAST. Olive shaped. Skin is bright pink on the upper part, and white on the lower part. It is very productive, early, exceedinglly crisp and tender. Days to maturity, 25.

BARTELDES GLASS. Our own introduction. We called it "Glass Radish" because the fllesh is almost transparent. Flesh is always crisp and brittle, of mild flavor, and does not become hollow in the center. Days to maturity, 23.

TOP. One of the most popular among gardeners and shippers because of its uniformity, attractiveness and a minimum of top growth. Of globe shape, very uniform and smooth with bright scarlet color. Days to maturity, 23.

CHERRY BELLE. One of the newer varieties. Very early with short top and well adapted for greenhouse or hotbed forcing. Cherry red in color, small, round with very fine root. Days to maturity, 22.

CAVALIER. Oblong, globe shaped of bright scarlet color with firm white flesh. Short tops. Excellent for forcing and a long keeper. Days to maturity, 25.

LONG VARIETIES

WHITE ICICLE. An entirely distinct, long, white variety. Ready for use fully as early as Long Scarlet Top, with less foliage, rendering it most desirable for forcing. Superior to any of the red varieties. Days to maturity, 27.

EARLY LONG SCARLET SHORT TOP. Root extremely long and slender, 5 to 6 inches in length, and only about a half inch in diameter. A standard variety for both home and market use. Days to maturity, 24.



ICICLE

SUMMER VARIETIES

WHITE STRASBURG. A productive variety which withstands summer heat well. Root is long, about 4 to 5 inches, pointed; skin is white, rather tender. Days to maturity, 39.

See Page 17 for Vegetable Seed Prices.

WINTER VARIETIES

This name is applied to those kinds which have such firm-fleshed roots that they will keep through a great part of the winter without becoming hollow. They should be sown in July or August.

LONG BLACK SPANISH. Root reaches a length of from 7 to 10 inches. Skin is very black, and somewhat wrinklled; flesh is white, firm and compact. Days to maturity, 62.

ROUND BLACK SPANISH. Root is round, sort of top-shaped, skin is black; flesh white, very firm. Roots keep well. Days to maturity, 60.

white chinese or celestial. A beautiful, large, white radish grown very extensively by the market gardeners for fall and winter trade. Root is white, cylindrical, very firm and mildly flavored. Days to maturity, 60.

ROSE CHINA WINTER. Root is large, red, with white tip. A very good keeper, and more mildly flavored than the Spanish types. Days to maturity, 53.

SUCKING INSECTS

These include aphids (plant lice) leaf hoppers, lace bugs and thrip. Probably the most troublesome for the amateur gardener and especially for the flower grower are the little green plant lice on roses, the little black plant lice on chrysanthemums, and the very tiny mites or red spiders on evergreens.

These small plant lice sometimes nearly cover the tender tips of roses, chrysanthemums and other flowers. The red spiders are so very small that they cannot be seen with the naked eye but if present can be detected by shaking the branches over a piece of white paper.

These insects do not eat the leaves of plants but suck the plant juices, so they must be killed by some contact poison which kills by its burning action, poisoning through the breathing apparatus, or by suffocation.

Among the standard insecticides to kill these are Black Leaf 40, Lindane, Aramite, Dimite, Rotenone, Pyrethrum, Sulphur, etc.

Most of the all-purpose insecticides contain one or more of the above and are therefore effective in combatting these little pests.

Insects Are Not So Tough If You Hit Them Early

The fight between man and insects is as old as time, and will probably continue indefinitely.

Fortunately for mankind, our chemists and other scientists have been bringing forth new chemicals, new formulations, and new methods of treatment.

In general, the enemies of plants fall in three classes:

- 1—Leaf-Eating Insects.
- 2-Sucking Insects.
- 3—Fungus diseases, such as black spot, downey mildew, etc.

Leaf Eating Insects Are Always With Us

The long practiced and still good way to kill leaf-eating insects is to spray or dust the plant with some poison like Arsenate of Lead or Paris Green. Then when the insects or worms eat these leaves they are poisoned and die. This method is still effective, but we now have some new insecticides added to the old ones. Among these are Rotenone, DDT, Lindane and Chlordane. These kill as stomach poisons, and as contact sprays.



PUMPKIN

Packet 10c

Planting Instructions: They require the same general culture as melons and squash-The common practice is to plant the seeds in the cornfield, either in hills or between the rows, after the last cultivation.

SMALL SUGAR. Most desirable variety for making pies. Smaller than the field pumpkin, round, flattened, fine grained, sweet and very prolific. Days to maturity, 112.

CONNECTICUT FIELD. The well known old Conneticut variety. Skin is of orange color, with deep orange flesh. Generally grown for feeding dairy stock. Days to maturity, 120.

CHEESE. A heavy yielder, and very good for a main crop variety. Flesh is pale yellow, tender, and of excellent quality. It is fine for pies. Days to maturity, 108.

KENTUCKY FIELD. A large variety, hardy.

kentucky field. A large variety, hardy, late and very profile. Fruit is rounded, flattened, with sweet yellow flesh. Excellent for canning. Days to maturity, 120.

KING OF MAMMOTH OR GENUINE MAMMOTH. The flesh and skin and of bright, golden yellow. It is one of the very best pie pumpkins ever grown, and a splendid keeper. Days to maturity, 120.

CUSHAW OR CROOKNECK. Sometimes called White Crookneck Squash. Has a hard white or green striped shell, and sweet, solid, yellow flesh. It is a good pie pumpkin. Days to maturity, 115.

Jungus Diseases

Fungus diseases are spread by tiny spores which float around on the breeze. The oldest (over a hundred years old) and still the standard remedy is Bordeaux Mixture. This is made of Copper Sulphate, and lime in the proper proportion.

Remember that in combating fungus diseases, an ounce of prevention is worth a pound of cure. Start spraying early in the season.

All Purpose Sprays and Dusts

These are of the greatest help to amateur These are combinations of ingardeners. secticides formulated to take care of leafeating insects, sucking insects and fungus diseases.

With a good spray pump, the proper size for the amount of work to be done, or a good duster and an adequate supply of one of these all-purpost insecticides, the amateur can keep his vegetables and flowers clean and healthy.

But, don't wait for the bugs to appear or the diseases to show up. Spray or dust once every week or ten days throughout the season. This takes but little time, and the results are well worth while.

Among these All-Purpose Sprays are "Acme All Round Spray," "Garden Guard," "End O' Pest," and "Barteldes Rose Dust."



RHUBARB

Planting Instructions: Succeeds best in deep, somewhat retentive soil. The richer its condition and the deeper it is stirred, the better. Sow in drills an inch deep, and thin out the plants to 12 inches apart. The following spring, transplant from 4 to 5 feet apart each way.

VICTORIA. A little later than Linnaeus. Stalks red, very thick, leaves broader than long, heart-shaped or rounded.

RHUBARB ROOTS

Ask for Prices

SALSIFY OR OYSTER PLANT

Packet 10c

Planting Instructions: Sow the seed in the spring in drills 1 foot apart and 1 inch deep, thinning out plants to 4 inches.

This vegetable, when cooked, resembles the oyster in flavor, is comparatively easy to grow, habits similar to those of the parsnips. Can be left in the ground during the winter; in fact, frost improves the quality.

MAMMOTH SANDWICH ISLAND. This is the largest variety; very uniform in size; most popular sort for this section.

SPINACH

Packet 10c

Planting Instructions: The first sowing of Spinach should be made one or two weeks before the last expected spring frost. Plant in rows 12 to 18 inches apart and then thin to 2 or 3 inches in the row. Successive plantings should be made until the approach of hot weather. Fall plantings, very popular, can be made up to within six weeks of first ex-

SAVOY LEAVED OR BLOOMSDALE. A rather curious kind with fairly large, much crumpled, glossy dark green leaves. Days to maturity, 39.

BLOOMSDALE LONG STANDING. Similar to the older type, but leaves are thicker, more rounded, and glossy. The new selection will remain a long time in condition for use without bolting, even in hot dry weather. Ready for cutting in about 40 days. Very good for successive sowings. Days to matur-

GIANT NOBEL OR GAUDRY. A heavy yielder, a fast grower, and produces the largest spinach. The leaves are very large, thick, broad, slightly crumpled. Arrow shaped with a rounded top, are medium green in color, very crisp and tender. Days to maturity, 42.

NEW ZEALAND. Not a true Spinach. A large, freely branched, spreading plant that produces a succession of small, very thick and fleshy, pointed leaves on round fleshy stems. The leaves and tips of branches are picked for cooking like Spinach. Days to maturity, 70.

SQUASH Packet 10c

Planting Instructions: The vining or winter squashes require a lot of room but the bush or summer squashes can be grown in any moderate garden. The summer or bush squashes should be planted in hills from 4 to 5 feet apart and the winter or vining kinds in hills from 6 to 10 feet apart, ten to twelve seeds in each hill, but thin them down to three plants in the hill.

BUSH or SUMMER SQUASHES

SUMMER CROOKNECK. A small crooknecked summer squash; fruit of a very bright, orange color, elongated, covered with numerous roundish excrescences. It is very early, productive, and of excellent flavor. Days to maturity, 50.

EARLY WHITE BUSH. Also known as the Patty-Pan squash. Very productive, very early. Days to maturity, 55.

WINTER SQUASHES

DELICIOUS. This fine new winter Squash is of the finest quality possible. In size it closely resembles the original Hubbard. For table use it cannot be excelled. Days to maturity, 105.

WARTED HUBBARD. Very hard, dark green shell, heavily marted; flesh is dry and sweet. Days to maturity, 100.

GOLDEN HUBBARD. Smaller than Hubbard, earlier to mature, and of a rich orange red instead of the dark olive green. Days to maturity, 90.

TABLE QUEEN. Also called Acorn and Des Moines. A small Squash 4 to 6 inches long by 3 inches in diameter. Shaped somewhat like an acorn with sides scalloped. Color of rind deep green, turning to orange when ripening. Matures early and is very prolific. Days to maturity, 58.

BLACK ZUCCHINI. Straight, cylindrical fruits, 3 to 4 lbs., 3 to 5 inches in diameter and 10 to 14 inches long. Very dark green color. Delicious when French fried. Days to maturity, 60.

See Page 17 for Vegetable Seed Prices.

· TOMATOES ·

Packet 10c

Planting Instructions: For a small garden, sow a few seeds in a shallow box or flower pot the beginning of March, and place in a sunny window. About May 15, set plants in the garden, 3 feet apart each way, watering freely at time of transplanting. If a large area is to be planted, sow seed in the hotbed in rows 5 inches apart and ½ inch deep. They should have frequent shallow cultivation. Water with "Take Hold Plus" when transplanting.

PRITCHARD OR SCARLET TOPPER (Wilt Resistant). The type known as self-topping. Fruits are large, smooth, globe-shaped, very solid with small seed pockets and no core. Mid-season late and very heavy cropper. Days to maturity, 78.

RUTGER'S. Medium to large fruits, shaped similar to Marglobe, but more flattened at the stem end. Color is fine red, seed cavity small. Days to maturity, 72.

MARGLOBE (Wilt Resistant). The Marglobe fruits are smooth, globular, meaty, almost coreless, and deep scarlet in color. They ripen uniformly, even around the stem, and resist cracking well. Days to maturity, 77.

EARLIANA. Fruits are deep scarlet and grow closely together in clusters of five to eight, are of medium size, smooth, and solid. Days to maturity, 66.

CHALK'S EARLY JEWEL. Plant is of robust growth, and very productive. Fruits of deep scarlet, somewhat flattened, very smooth, of large size, excellent flavor, ripen early, and bear late. Days to maturity, 70.

NEW STONE. A fine main crop variety. The vine is a strong grower, very productive, and its fruits are large, smooth, rounded or deep and slightly flat at the top and bottom. Days to maturity, 86.

GROTHEN'S GLOBE. An improved Break O' Day with heavier vines. Fruits red with thick walls and firm meat. Days to maturity, 68.

GREATER BALTIMORE (The Great Canning Tomato). On account of its size, shape, color and enormous yield the Greater Baltimore has become immensely popular with the canners. It yields heavily and is a most dependable variety. Days to maturity, 82.

BISON. An extra early self-topping variety. Fruits are scarlet or red, medium size, thin cell wall. Vine is dwarf, vigorous and a heavy producer. Recommended as an early variety. Days to maturity, 68.

PONDEROSA. Although this variety has been known for a long time, it is still unsurpassed for size. The immense fruits often weigh $1\frac{1}{2}$ to 2 pounds, are meaty, and of delicious flavor. Days to maturity, 88.

GOLDEN PONDEROSA. Similar to the Red Ponderosa except in color. Many consider the yellow of better flavor and less acid. Very attractive in combination with red slices on a salad plate.

FIRESTEEL TOMATO. Fruits are scarlet red, medium size, almost globular, smooth, small core, very fleshy and firm. Practically no cracking. Days to maturity. 65.

SMALL TOMATOES

YELLOW PEAR, RED PEAR, RED PLUM, YELLOW PLUM. Used for preserving.

Water Tomato Plants at transplanting with "Take Hold Plus." You'll be amazed at the result.

See Page 17 for Vegetable Seed Prices.

Hybrid TOMATO

F2 STOKESCROSS No. 5

Early Main Crop. 75 days. 6 oz.

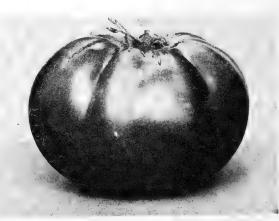
(F2 stands for second-generation hybrids.)

We were so well pleased with the yields and the quality of this Hybrid Tomato that we are pleased to offer it again. Don't let another season get by without trying it.

This Tomato is distinguished by its amazing vigor. Production increase up to 30% is not unusual. Due to its maturing first hands, and a continuing harvest of large, smooth-shouldered fruit, the picking season is extended at least two weeks. The unusual vigor of Stokescross No. 5 will at once be recognized by tomato growers. This directly contributes to its high color and rich flavor. No. 5 was bred essentially as a processing Tomato, but it has proved to be extremely profitable on the green wrap and climax basket markets. Market reports indicate that Stokescross No. 5 far outsold competing open-pollinated varieties.

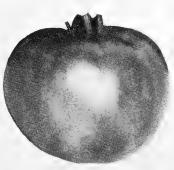
Garden Packet	\$0.25
Trade Packet (about 500 seeds)	1.00
Ounce (about 5,000 seeds)	5.00

Dust Tomato Plants with Acme Tomato Dust for protection against Blight, Hookworm, Fruitworm and Flea Beetle.



PONDEROSA

STOKES F2 HYBRID





MARGLOBE

TURNIPS

Packet 10c

Planting Instructions: For the early crop, sow the seed as soon as the ground can be prepared; for the late crop, sow in the latter part of July or early in August. The rows may be 12 to 18 inches apart or 26 to 30 if a horse cultivator is to be employed. If one good seed is dropped every inch of furrow the stand should be satisfactory.

WHITE FLESHED VARIETIES

The earliest varieties are the two Milan Turnips. These reach a size of 2 to 3 inches in sixty days and it is at this size that they are best.

EXTRA EARLY PURPLE TOP MILAN. The earliest in cultivation. Very flat, medium size, with a bright purple top; leaves few, short, and light of color. The pure white flesh is of choicest quality, hard, solid, and fine grained. It is an excellent keeper.

EXTRA EARLY WHITE MILAN. Root small, very smooth, flat, entirely white, with a slender tap-root; leaves small and few, undivided, oval.

PURPLE TOP STRAP LEAVED. The standard for this part of the country. The root is small or medium sized, very flat, quite smooth, pure white on the

See Page 17 for Vegetable Seed Prices.

underground part, and bright violet-red

on the upper part.

EARLY WHITE EGG. A quick-growing, egg-shaped variety. The flesh is very sweet, firm and mild, never having the rank, strong taste of some varieties.

PURPLE TOP WHITE GLOBE. An old favorite. Root large, quite round, white underground, and purple on the upper part for about one-half of the length of the root.

SEVEN TOP. The salad turnip. When sown in the early spring it produces greens very quickly.

PURPLE TOP YELLOW RUTABAGA.
The best variety of the Swedish turnip.
It is hardy and productive, flesh is
yellow, of solid texture, sweet and well
flavored. Rutabaga requires more room
and a longer period for its growth than the turnip.

Signs of the Zodiac and Their Accepted Influences

Taries: Tends to dryness, barrenness. Fairly good for cultivating, spraying and weeding.

8 TAURUS: Fairly productive. A good sign for planting root crops particularly potatoes and bulbous plants.

☐ GEMINI: Dry and barren. Not good for any kind of planting or transplanting. Kill noxious growths.

CANCER: Moist, very fruitful, most productive of the Zodiac. Planting and transplanting should yield good crops. Irrigate, bud, graft, transplant.

a LEO: Most dry and barren sign. Use only to kill weeds, destroy roots, etc.

my VIRGO: Moist but barren. Not recommended for planting or transplanting; good for cultivating and destroying.

△ LIBRA: Fairly fruitful. Seed for hay corn, fodder, etc. Produces vigorous pulp growth, reasonable amount of grain. Good for flowers.

m SCORPIO: Next to Cancer in productiveness. Irrigate but do not dig potatoes.

1 SAGITTARIUS: Generally considered barren but used by many for onions, seeding for hay, destroying weeds, etc.

V3 CAPRICORN: Earthly, fairly productive. Similar to Taurus but drier. Bulbous flowers, potatoes, tubers, root crops.

AQUARIUS: Somewhat barren. Good only for cultivation and extermination of pests.

** PISCES: Similar to Cancer so use for same purposes. Very productive. Do not dig potatoes.

When to Plant

The tables at right show when the moon enters each sign of the Zodiac. It also shows the moon's changes.

Under each month, we show first the time at which the moon enters each SIGN (day of the month and hour of the day, Central Standard Time). Then we show the moon CHANGES (day and hour) for each month.

1st QUARTER MOON, INCREASING

-During 1st Quarter of Moon plant the following: Asparagus, Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Celery, Corn, Cucumbers, Endive, Kohlrabi, Leeks, Lettuce, Spinach, Barley, Oats, Rye, Wheat.

) 2nd QUARTER, MOON INCREASING —During 2nd Quarter of Moon plant the following: Beans, Egg Plant, Melons, Peas, Peppers, Pumpkins, Squash, To-

matoes, flowers, and cereals. When possible, plant seed while the Moon is in the fruitful signs of Cancer (\mathfrak{S}), Scorpio (\mathfrak{M}), or Pisces (\mathfrak{H}). The next best signs are Taurus (\mathfrak{H}), Libra (\mathfrak{S}) and Capricorn (\mathfrak{H}).

② 3rd QUARTER, MOON DECREASING —During 3rd Quarter of Moon plant the following: Beets, Carrots, Chicory, Parsnips, Potatoes, Radishes, Rutabagas, Onions, Turnips, Tubers.

(4th QUARTER, MOON DECREASING -In 4th or Last Quarter of the Moon turn sod, pull weeds, and destroy noxious growths, especially when Moon is in barren signs, Gemini (Π), Leo (Ω), Virgo (M) or Aquarius (SS).

Note: Time listings below are Central Standard Time.						
JANUARY 1 S3:20p 4 mg3:42α 6 ← .4:35p 9 m3:42α 11	16 Y2:33a 18 ∀3:53a 20 ∏8:27a	MARCH 2 \$\times\$.5:40\$\alpha\$ 4 \$\pi\$.5:28\$\bar{p}\$ 7 \$\psi\$.3:19\$\alpha\$ 9 \$\bar{p}\$.10:07\$\alpha\$ 11 \$\pi\$.1:33\$\bar{p}\$ 13 \$\pi\$.2:14\$\bar{p}\$ 15 \$\bar{p}\$.1:48\$\bar{p}\$ 17 \$\bar{p}\$.1:48\$\bar{p}\$ 19 \$\pi\$.4:41\$\bar{p}\$ 21 \$\pi\$.11:33\$\bar{p}\$ 24 \$\bar{p}\$.10:16\$\alpha\$ 26 \$\pi\$.11:50\$\alpha\$ 31 \$\pi\$.11:17\$\bar{p}\$	APRIL 3	MAY 2 ⅓9:52p 5 ≈3:11a 7 ★6:45a 9 Ŷ8:48a 11 ୪ .10:13a 13 ∐0:30p 15 ⊆5:22p 18 Ω1:49a 20 ♍1:29p 23 ←2:16a 25 ♏1:29p 27 ‡ .10:05p 30 ⅓4:15a	JUNE 1	
Changes (8:.4:09a ● 158:08a) 21.11:43p ② 295:44p	Changes (6.10:09p 137:10p 20.11:44a ② 28.00:59p	Changes (8.00:26p 155:05a) 222:10a (306:55a	Changes (6.10:58p 132:09p 206:45p ② 28.10:20p	Changes (66:20a 12.11:06p) 200:22p ② 28.11:03a	Changes (3.11:35a ● 118:55a) 196:02a ⊕ 269:39p	
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TOBACCO

Packet 10c

HAVANA. Pure Cuban grown seed. When grown in this country commands a high price as cigar stock.

WHITE BURLEY. A variety grown for the manufacture of fine cut and plug.

HERBS

NO GARDEN IS COMPLETE WITH-OUT A FEW HERBS

> Anise Balm Borage (Gurkenkraut) Caraway Catnip or Catmint Chervil, annual Coriander, annual Dandelion (Loewenzahn) Dill, pkt. 10c Horehound Hyssop Lavender Rosemary Rue Sage Savory Sorrel Sweet Basil Sweet Fennel Sweet Morjoram Sweet Thyme Wormwood

All Herbs Except Dill 15c Per Packet

Try this. In planting your garden seeds, drop an onion set about every 10 feet in the row. The onion sets will start quickly and mark the row until the slower starting seeds show up. Thus you can cultivate early before the vegetable seeds come up without danger of disturbing them. In this way you can keep ahead of the weeds and the onions can be eaten before the vegetables need the space.

If your vegetable garden is on a slope and has a tendency to wash during heavy rains, try this. Plant rows of common Iris in rows across the slope. These will hold soil from washing if the slope is not too steep and at the same time will add beauty to your garden. If you want to move them later it is very easy to do so and you will have an abundance of Iris roots to plant elsewhere or to give to your friends. The cost is negligible.

VEGETABLE GARDEN PLANTING GUIDE

>>> →	Seed Required Per 100 Feet or				
→→	(P) Per 1,000 Plants or (H) Per 100 Hills	Seed Required Per Acre	Distance Between Rows	Distance Apart In Row	Depth To Plant In Inches
Asparagus	(P) 1½ oz.	4 lbs.	2 ft.	5 in.	1
Beans, Bush		60 lbs.	2 ft.	3 in.	$1\frac{1}{2}$
Beans, Pole		30 lbs.	3 ft.	4 ft.	1½
Beets		10 lbs.	1½ ft.	4 in.	1/2
Broccoli		4 oz.	2 ft.	2 ft.	1/2
Brussels Sprouts		4 oz.	2 ft.	18 in.	1/2
Cabbage		4 oz.	2 ft.	18 in.	1/2
Cantaloupe		3 lbs.	6 ft.	4 ft.	3/4
Carrot		4 lbs.	1½ ft.	3 in.	1/2
Cauliflower		4 oz.	2 ft.	20 in.	1/2
Celery		4 oz,	2½ ft.	6 in.	1/4
Chicory		4 lbs.	2 ft.	3 in.	1/2
Collards		4 oz.	2 ft.	20 in.	1/2
Corn, Sweet		12 lbs.	3 ft.	6 in.	. 1
Corn Salad		10 lbs.	1½ ft.	3 in.	1/2
Cress, Curled		10 lbs.	1½ ft.	3 in.	1/4
Cucumber		2 lbs.	6 ft.	4 ft.	1/2
Dill		5 lbs.	3 ft.	6 in.	1/2
Eggplant		4 oz.	2 ft.	24 in.	1/2
Endive		4 lbs.	2 ft.	12 in.	1/2
Kale		3 lbs.	2 ft.	18 in.	1/2
Kohlrabi		4 lbs.	1½ ft.	5 in.	1/2
Leek	1 oz.	5 lbs.	1½ ft.	3 in.	1/2
Lettuce	½ oz.	3 lbs.	1½ ft.	8 in.	1/2
Mustard	1 oz.	4 lbs.	1½ ft.	5 in.	1/2
Okra	2 oz.	8 lbs.	3 ft.	18 in.	1
Onion Seed	1 oz.	4 lbs.	1½ ft.	3 in.	1/2
Onion Sets	2 lbs.	600 lbs.	1½ ft.	3 in.	1
Parsley	½ oz.	3 lbs.	1½ ft.	5 in.	1/2
Parsnip	1 oz,	4 lbs.	1½ ft.	4 in.	1/2
Peas		120 lbs.	2 ft.	2 in.	1½
Pepper	(P) 1 oz.	3 oz.	2 ft.	2 ft.	1/2
Pumpkin	(H) 4 oz.	4 lbs.	6 ft.	6 ft.	. 1
Radish	1 oz.	10 lbs.	15 in.	1 in.	1/2
Rutabaga	1 oz.	2 lbs.	1½ ft.	6 in.	1/2
Salsify	2 oz.	8 lbs.	2 ft.	4 in.	1/2
Spinach	2 oz.	20 lbs.	1½ ft.	4 in.	1/2
Spinach, New Zealand	1 oz.	3 lbs.	1½ ft.	4 in.	1
Squash, Bush	(H) 4 oz.	4 lbs.	5 ft.	5 ft.	1
Squash, Vine		2 lbs.	10 ft.	8 ft.	- 1
Tomato		4 oz.	3 ft.	3½ ft.	1/2
Turnip		2 lbs.	1½ ft.	4 in.	
Watermelon		4 lbs.	. 10 ft.	8 ft.	3/4
					72.

Plant the BEST - BARTELDES!

VEGETABLE SEED PRICES

½ oz ASPARAGUS\$0.15		½ lb. \$0.60			½ oz.	1 oz.	⅓ lb.	1 lb.
		,	\$2.25	OKRA		.15	.35	.90
222 22 10			\$0.55	PARSLEY		.15	.40	1.25
Wade, Logan, Tenderlong 15\$0.35 Top Crop, Contender	.50	\$0.58 .47	.45	PARSNIP		.15	.35	1.10
Other Green Pod and Wax Pod .25 Lima Beans		.42 .47	.40 .45			~	.00	
BEET	z. 1 oz. .20	. ¼ lb .40	. 1 lb. 1.25	PEAS Peas—All varieties	½ lb.	1 lb.	5 lbs.	10 lbs.
BORECOLE or KALE	.20	.50	1.60				, .33 ¼ lb.	.30 1 lb.
BROCCOLI	.20	.60	2.25	PEPPER		.50	1.75	6.50
BRUSSELS SPROUTS				PUMPKIN			-	
	.25	.80	2.75	Cushaw, King of Mammo Other varieties		.15 .15	.50 .45	1.80 1.50
CABBAGE			*	other varieties	************	.13	.+3	1.50
Jersey Queen, Wisconsin	.35	.90	3.50	RADISH		.15	.35	.90
Other varieties	.25	.75	2.50	RHUBARB		.20	.75	2.80
CARROTS	.20	.60	1.75					
CAULIFLOWER	1.50	••••	****	SALSIFY		.40	1.40	4.50
CELERY	.45	1.75	6.00	SPINACH				
COLLARDS	.15	.35	.90	New Zealand, Mustard S Other Spinach	_	.15 .15	.30 .25	.80 .60
CUCUMBERS				_				
Hybrid	4.50		*****	SWEET CORN Hybrids—Golden Cross E	1/2 lb.	1 lb.	5 lbs.	lbs.
Early Fortune and National Pickling	.20	.60	1.75	Ioana, Truckers Favor	ite	.50	.47	.45
All others	.20	.70	2.25	Marcross, Carmel Cros Illinois No. 10, Iochie	f,)	,,,,,,	• • • •	
EGGPLANT .25		1.75	8.00	Tendergold, Evergred Hybrid Country Gentle		.55 .65	.52 .62	.50 .60
ENDIVE	.15	.50	1.50	SQUASH	½ oz.	1 oz.	⅓ lb. .45	1 lb.
KOHL-RABI	.20	.60	2.00	,	*****	.15	,43	1.60
LEEK .25	.40	1.20	3.75	TOMATO				
LETTUCE				F2 Stokesdale Hybrid Bison		5.00	2.10	7.50
Black Seeded Simpson,	,			Chalk's Early Jewell Earliana	30	.50	1.75	6.00
White Seeded Simpson, Big Boston, Prizehead,		.60	1.75	Firesteel		.60	2.00	7.00
Grand Rapids			,	Greater Baltimore Grothen's Globe		.50 .50	1.75 1.75	6.00
Oak Leaf	.20	.70	2.00	Marglobe Marglobe Certified		.50 .55	1.75 1.90	6.00
New York No. 12	.35	1.00 1.50	3.50 5.00	Ponderosa Pritchard		.75 .55	2.50 1.90	9.00 6.50
Great Lakes	.45 .50	1.75	6.00	Pritchard Certified		.60	2.00	7.00
MUSKMELON	.20	.60	2.40	Rutgers Certified		.40 .45	1.25 1.40	4.00 4.50
				Stone		.50 .75	1.75 2.50	6.00 9.00
MUSTARD \$	\$0.15	\$0.40	\$0.80	Yellow Pear		.70	2.40	8.50
ONIONS				TURNIP		.15	.30	.80
Sweet Spanish	.50 ,50	1.30 1.30	4.25 4.25		*****			
White Lisbon	.35	1.00	3.50	WATERMELON				
Yellow Globe Danvers	.30	1.00	3.25 3.25	New Hampshire Midget.			1.00	3.25
Southport Red Globe	.40	1.20	4.00	Florida Giant Certified Dixie Queen, Florida Gian		.30	1.00	3.25
Large Red Wethersfield	.35	1.10	3.50 4.00	Irish Gray	*************	.20	.75	2.25
Southport White Globe	.40	1.20 1.75	4.00 6.00	Other varieties	******	.15	.50	1.75
Parteldes Early Grano	.35	1.00	3.00	Prices for $\frac{1}{2}$ oz., 1 oz. and	1/4 lb. are no	stpaid		
White Ebenezer	.35	1.10 1.10	3.50 3.50	/2 /2 4114	And the part of the control of the c			
Crystal White Wax	.35	1.10	3.50	Prices for 1/2 lb., 1 lb., 5 lb	s. and 10 lbs	.are n	ot post	paid.



"Hello there. This is Leon (La-un), Your Gardening Girl Friend." If you live within a listening distance of Radio Station KLWN, Lawrence, Kansas, that opening line may be familiar to you, and if so, you will know comments on gardening are to follow. Since these programs are sponsored by The Barteldes Seed Co. some of the ideas and suggestions given on the air the past season are being repeated here.

I am not a professional gardener, just a gal that likes to dig, and after having spent some years at that hobby have learned a few things: Here's hoping that by sharing some of that experience with you, it may help make your gardening a little easier and more successful. If any of you readers have suggestions or questions along this line, I will be glad to hear from you. Please address all mail to Leon, Your Gardening Girl Friend. Radio Station KLWN, Lawrence, Kansas.

To the interested gardeners, spring is the time of anticipation, whether they have owned their home long enough to have an established garden, or the new home owner with plans they hope to see materialize. It might be a renter, who feels it scarcely worth their while to go in for perennials, yet wants as colorful a flower border as can possibly be accomplished with annuals.

While waiting for it to be warm enough to do actual work in the flower borders, do everything possible to speed that work once it is started. An early start helps the gardener to stay abreast with the chores all summer.

One of the first things to do is clean and sharpen all garden tools. Make a definite place where they are to be put when not in use. Put a large can of sand in which some old motor oil has been poured, close to the tool storage and press the tools up and down in this several times after each use. The sand will clean the tools and the oil will prevent them rusting and help to maintain their sharp edge. Tool handles painted red, yellow, or some bright color of your own design, are easier identified or located in the grass where they are left after using. Do try to form the

FLOWERS

ALYSSUM A-1

(Height 6 to 12 inches.) This plant is used for borders, edgings, baskets, pots, rock-work and for cutting.

Dwarf (Carpet of Snow). Very small, with pretty white flowers. Blooms all summer and fall. Pkt., 10c.

Sweet Alyssum. Standard variety for borders, window boxes, masses, etc. It is of trailing habit, bearing many fragrant white flowers. Pkt., 10c.

AGERATUM MEXICANUM. A-1 Annual. (Height 12 inches.) The plants are bushy, erect, and produce clusters of pretty bush-like blue flowers throughout the season. They make fine borders. Pkt., 10c.

AMARANTHUS A-1

(2 to 5 feet.) These robust annuals are grown for the brilliantly colored foliage. They grow very tall and are very effective and showy garden plants, adapted for centers and backgrounds of flower beds.

Caudatus (Love Lies Bleeding). Has long drooping red spikes. Pkt., 10c.

Tricolor (Joseph's Coat). The inner foliage is black and bronze, tipped with green, and the outer foliage is bright red and yellow. Pkt., 10c.

Cruentus. Bears dark red feathery flowers. Very hardy. Pkt., 10c.

ANTIRRHINUM A-1 (Snapdragon). (Height 12 to 24 inches.) Flowers the first season. They are useful for cutting and keep fresh a long time. From seed sown in the open ground in May, plants will bloom in July and August and then continually until frost. Coral Red, Bright Red Color with White Throat. Pkt., 10c.

Queen of the North. Snow White. Pkt., 10c.

Tall Mixed. Pkt., 10c.

Dwarf Mixed. Pkt., 10c.

ASPARAGUS FERN (Plumosus Nanus). Feathery foliage; used for hanging baskets. Pkt., (15 seeds), 15c. House plant.

ASTERS A-1

The Aster is one of the most satisfactory of the annual flowering plants. It has a great variety of size and color and its season of bloom makes it valuable for cut flowers. The dwarf varieties lend themselves to close planting for cut flowers, while the tall varieties are well adapted where careless effects are desired.

Giant Aster. Their immense size, their beauty and their long, sturdy stems will give them the first place among Asters. Mixed colors, Pkt., 20c.

Giant Crego Aster. These flowers are of immense size and borne on long stems, have appearance of Chrysanthemums; 30 inches high and bear an abundance of flowers during August and September. Pht., 10c. Pht., 10c.

A—Annual. B—Biennial. P—Perennial. Culture 1, 2, 3, 4.

A-1 means Annual and Culture 1.

Culture 1: Annuals—Sow seed in flats, inside for transplanting later, or outside after danger of frost. Seed may be sown where plants are to bloom and thinned to 18 to 24 inches (transplant the seedlings taken out), or it may or may not be planted in rows for easier care and transplanted later into flower border. Annuals should have sun at least half days.

Culture 2: Annuals that reseed, differ in different localities. May be planted in fall or early spring, as cold does not affect germination. All annuals can be planted over tulip and similar bulbs as their shallow root system will not be detrimental to the bulb. Annual plants can be used successfully to cover bulb foliage while curing.

Culture 3. Biennials can be planted in either open ground or the border and thinner. May be planted any time from late spring to early fall. Our dry-summers may burn out the new plants unless protected and kept watered. The new plants should be mulched to prevent serious loss.

Culture 4: Perennials can be planted in cold frames any time and when the new plants are large enough, transplant to the flower border. New plants put in the fall should be mulched the first winter. Plant perennial seed in open ground before August, so plants will have a better chance wintering over (with mulch). Some perennials do very well in shade. Columbine, Mertensia, Bleeding Heart and Violets are a few of these.



habit of cleaning and putting away all tools after using. No garden is lovely when a visitor may fall over a hoe or something else equally dangerous.

The peony stems should have been removed close to the ground as possible and burned last fall, to kill the boritus. But if it was not done at that time, do so as soon as possible. At the time of cleaning sprinkle the ground around the peonies with generous amount of Bordeaux Mixture. The winter or spring moisture following will take the Bordeaux into the ground and destroy boritus wintering there. Peony buds that dry into little brown knots when there has been no frost to bring this about are no doubt suffering from boritus. Peonies should be sprayed with Bordeaux Mixture about every two weeks during growing season for healthy foliage. If peony stems are removed and burned about the middle of August, before the boritus has had a chance to go into the ground, the plants will benefit. Give peonies a generous feeding of bone meal (their favorite food) in the fall. Bone meal is a slow acting fertilizer and should be applied in the fall so as to be ready to feed the new hungry growth in the spring.

To satisfy that early desire to plant something, plant sweet peas. If you wish to enjoy sweet pea bouquets later, this must be done early. Some say, not later than George Washington's birthday. If the rows run north and south, the vines will get full sun all day. Train the vines on string and never use wire as it attracts heat and will burn the vines out earlier.

Remember the mulch on the perennial border and roses are to prevent them thawing and freezing and not just freezing alone. Be sure there is no danger of freezing temperatures before you remove the mulch. First, loosen it and then remove a little at a time, taking about a week for the task. If the mulch is removed all at one time the shock might set the plants back temporarily if not permanently.

And now, before we go any further, let us be sure we all understand what is meant when we say annuals, biennials and perennials.

Annuals are plants that bloom the first season from seed sown that season. Zinnias are probably the most widely grown annual.

Annuals that reseed are almost as good as perennials. The seed blowing to different loca-



ASTER

ASTERS A-1—Continued

Quilled Aster. One of the popular Needle type and entirelly distinct from other varieties. Pkt., 10c.

Comet or Branching Asters. A medium, tall variety, excellent for cutting, fllowers very large, petals long, twisted and wavy, making a very graceful Chrysanthemum-like flower. Mixed colors. Pkt., 10c.

Good Mixed Asters. This splendid mixture is unequaled for an assortment of kinds and colors. Pkt., 10c.

BACHELOR'S BUTTON (Centaurea Cyanus). A-2. (2 feet.). Also called Cornflower, Ragged Sailor and Blue Bottle. Excellent for cutting. Reseeds itself so that it is practically perennial in habit. Pkt., 10c.

BALSAM (Lady Slipper). A-2 (Height, 2 feet.) The flowers are of brilliant colors and are produced in great profusion. Tender annuals, should be started indoors in April or sown outdoors in May. Double Mixed. Double White. Double Camelia-Flowered (fine.) Pkt., 10c.

BELLIS PERENNIS (Double Daisy). P-4. (6 inches.) The flowers are quilled and flat-petaled.

Longfellow. Pink. Pkt., 10c.

Snowball. White. Pkt., 10c.

Mixed. Pkt., 10c.

BRACHYCOME. A-1 (6 inches.) A delicate dwarf growing plant, suitable for growing in masses, edging and rustic baskets. Flowers are of blue, lilac and white with dark and white centers. Pkt., 10c.

BURNING BUSH or SUMMER CYPRESS (Kochia Trichophyla)
A-1. Remains green all summer and turns deep red in the fall. Makes fine annual hedge. Pkt., 10c.

CALENDULA OFFICINALS (Pot Marigold) A-1. (18 inches.)
This splendid variety has large, double flowers beautifully imbricated, resembling in form and size the finest asters. Of straw color is blooms profusely from July till frost. Pkt., 10c.

CALLIOPSIS (Tickseed). A-2. (2 feet.) One of the garden's great forces in yellow, strengthened with rich maroons and browns. Flowers from August until frost. Pkt., 10c.

CAMPANULA MEDIA (Bell Flower). P-4. (1½ to 2 ft.) The fine bell-shaped flowers are large enough to attract attention by themselves. Pkt., 10c.



CANDYTUFT A-1

(1 foot.) Plants are about a foot high and very bushy. Various colors. The white flowers are very fragrant. Do not transplant well.

White. Pkt. 10c.

Dwarf Tom Thumb, mixed. Pkt., 10c.

Many Colors, mixed. Pkt., 10c.

CANNA. A-1. (3 feet.) Cannas are usually grown from bulbs but are very easily grown from seeds. Some fine varieties are developed by planting the seed. Pkt., 10c.

CARNATIONS A-1

(18 inches.) This beautiful and well known flower produces a finer bloom when grown from seed than grown from cuttings taken from old plants.

Marguerite Carnation. The most popular variety for the amateur. Flowers in a few weeks from the time of sowing and produces beautifully fringed and wonderfully fragrant flowers. Pkt., 10c.

CASTOR BEANS A-1

(6 to 10 feet.) A luxuriant expansive foliage plant, of tropical appearance. The stalks of the plants are brownish red, the leaves are very large.

Sanguineus. Large Red. Pkt., 10c.

Zanzibariensis. A giant variety introduced from New Zanzibar. Pkt., 10c.

CENTAUREA A-1

Centaurea Candidissima (Dusty Miller). 1½ to 2 feet.) Fine foliage plants for bedding, baskets, pots and borders. The leaves are silvery white. Pkt., 10c.

Centaurea Imperialis (Royal Sweet Sultan). The beautiful, sweet-scented flowers are borne on long stems and will keep a long while. Pkt., 10c.

tions change the pattern of the garden from year to year. Since this seed can be scattered in the fall it saves time for the gardener when there are so many spring chores to do and very often these are up long before the gardener would have had time to plant them in the spring. Some I have found satisfactory are: Cleome, Larkspur, Cornflower, Balsam, Love-in-a-Mist, Salvia, Green Bells of Ireland, Celosia, Petunia (plain), Calendula, French Marigold, annual Phlox.

Biennials are plants that make a growth the first year but seldom bloom before the second year, and live only two years. Foxglove and Canterbury Bells are two good examples of this type plant.

Perennials are plants that live year after year if given the proper care. Can be grown from seed, multiplied by root division, and some by cuttings rooted in sand or vermiculite.

No flower can be better than the seed producing it. Always purchase the best seed available so your work will not be wasted.

A great deal of confusion could be avoided by everyone learning the botanical name of the plants they are interested in. The common name varies so in different locations. The first time you use the botanical name you may feel as though dynamite had exploded in your head, but you soon wonder why you ever used any other.

A good deal of work can be saved by planning on paper what you want to plant, and where you want to plant it. In planning the flower border, use plenty of blues, whites and pale yellows to separate the pinks, lavenders and oranges. For instance, blue between pink and orange will separate the two clashing colors and at the same time be complimentary to both. Since there is a scarcity of blues, you may find it necessary to use the same variety several times. White flowers are more plentiful, white shows up well by moon or artificial light, therefore are especially desirable around doorways. Pale yellow planted next to orange will blend with several colors that would clash with the orange. But nature uses all colors together, and she is considered the greatest



CHRYSANTHEMUMS. Early Annual Chrysanthemum. A-2. A beautiful double variety of easy culture. If the plants are pinched back until July 15th they will be more branching. Pkt., 10c.

CLEOME (Rocky Mountain Bee Plant or Spider Pliant). A-2. (3 feet.) Spikes of rose-pink flowers on long wiry stamens resembling the spider. Hardy, and excellent for tall borders, since they reach a height of 3 to 4 feet. Pkt., 10c.

COCKSCOMB A-1

(Celosia.) ($2\frac{1}{2}$ feet.) There are many colors and shapes, but the scarlet and crimson ones are the most brilliant and rich.

Dwarf Mixed. Pkt., 10c. Tall Mixed. Pkt., 10c.

Giant Empress Cockscomb. Flowers of enormous size. Pkt., 10c.

Feathered Cockscomb. Flowers look like graceful plumes of brilliant colors. Pkt., 10c.

COLEUS. The leaves are of many shades and colors and are of remarkable beauty. Pkt., 25c. House plant.

COLUMBINE P-4

(Aquilegia Coerulea.) ($1\frac{1}{2}$ to 2 feet.) The state flower of Colorado. The colors range from light to dark blue.

Yellow Columbine. Pkt., 10c.

Mixed Columbine. Pkt., 10c.

Rocky Mountain Columbine. Blue. Pkt., 10c.

COREOPSIS (Lanceolata). P-4. (2 feet.) This is a rapid growing hardy perennial. The fllowers are bright yellow; very attractive. Blooms the first year from seed. Pkt., 10c.

COSMOS A-2

(3 to 5 feet.) A strong, tall growing annual. Most effective when planted in masses or background borders against fences.

Early Flowering. Mixed. Pkt., 10c.

Late Flowering. In white, Pink, Crimson, Yellow, and Mixed. Pkt., 10c.

Double or Crested Cosmos. These double crested flowers are of decided improvement over the single flowers and are just as easily grown. Pkt., 10c.

Orange Flare. Three feet tall, well branched. Showy, golder orange flowers in three months from seed. Pkt., 10c.

DAHLIA A-1

These well known flowers are commonly grown from the tubers but may also be grown from seed.

Single Mixed. Pkt., 10c.

Double Mixed. Pkt. 10c.

DELPHINIUM HYBRIDUM P-4

(Perennial Larkspur) (3 to 4 feet)

Seed sown early in the spring will bloom in August. Splendid for planting in hardy borders.

Delphinium Formosum. Dark blue. Pkt., 10c.

Delphinium Belladonna. Light blue. Pkt., 10c.

Mixed. All, pkt., 10c.

DIANTHUS PLUMARIUS. P-4. (1 foot). The old fashioned June Clove or Grass Pinks. Hardy. Fine for rock gardens. Pkt., 10c.

ESCHSCHOLTZIA (California Poppy). A-1. (1 foot.) The state flower of California. Finely cut foliage and bloom from June until frost. Pkt., 10c.

EVERLASTING FLOWERS. A-1. (18 inches.) A fine mixture of the straw-flowered varieties. Will retain their color all winter. Pkt., 10c.

FEVERFEW (Matricarla Capensis) P-4. (3 feet.) A very free flowering border plant, bearing masses of white or yellow flowers. Pkt., 10c.

FORGET-ME-NOT (Myosotis Alpestris). P-4. (6 to 8 inches.) They grow best in moist soils. The flowers are blue. Should be given a slight protection in winter. Pkt., 10c.

FOUR O'CLOCK (Marvel of Peru or Mirabilis Jalaba). A-1. (3 feet.) It blooms during late summer and autumn, opening its fllowers only late in the afternoon and on cloudy days. Pkt., 10c. Do not transplant well.

FOXGLOVE (Digitalis). P-4. (3 to 5 feet.) Flowers are of all colors, are bell or thimble-shaped, and borne in tall spikes. Hardy. Pkt., 10c.

FUCHSIA. House plant. A well known greenhouse plant, which will bloom from seed the first year if planted early. Pkt., 25c.

DOUBLE COSMOS



COCKSCOMB





of all artists, so do not let your fear of wrong color combinations keep you from having fun growing flowers.

In these days of turmoil, it is soul healing to get out by yourself and dig in God's Good

In planning the flower garden, try to put the taller ones at the back, the medium height in the center of the border and the shorter ones at the front. The very fact that some will not be the height you expect will make your garden more attractive and less monotonous. But do have enough of one color or variety in a place to make a showing and avoid that spotty look one plant gives. Different texture leaves as well as color of foliage can add interest when bloom is scarce, so give this some consideration when planning the flower border. If possible, try to have the border about 5 feet deep. A border less than 3 feet seldom shows to a good advantage if planted with a large variety of plants.

After the mulch is removed, one of the first things to do is separate the perennials needing it. Do not permit the perennials to become too crowded. If they did not do well last season, and have not been divided for some time and appear crowded, this should definitely be done. Sometimes a perennial will do better in a different location. The drainage, shade or soil may cause this.

Some perennials seem to prefer spring dividing. Platacodon (balloon flower), is one of these. Heuchera (Coral Bell) can be divided spring or fall. In the fall it should be done early enough for the new division to become established before cold weather, or in the spring before the new growth is too far along. Each little rosette will make a good plant. If the crown of Heuchera is permitted to become crowded it will die out.

To divide Phlox or Mums, dig and wash all the soil off the roots. Then divide into from one to three stems per plant. If the roots do

GAILLARDIA (Blanket Flower). P-4. (1½ feet.) A splendid showy perennial; very satisfactory as cut flowers. The stems are of good length, carry the flowers well. Pkt., 10c.

GLOBE AMARANTH (Gomphrena Globosa). A-1. (10 inches.) A good bedding plant. The flowers resemble clover blossoms, are of purplish-red, white and striped colors. Pkt., 10c.

GREEN BELLS OF IRELAND, A-1. A most interesting plant, producing green bell-like flowers that make beautiful winter bouquets. Pkt., 25c.

GYPSOPHILA A-1

(1 foot.) Small white and pink fairy-like flowers, borne on long, feathery stems. Blooms from first of July till frost.

Elegans Pink. This delicate rose-pink flower makes a beautiful border. Pkt., 10c.

HELIANTHUS or SUNFLOWER A-1

(3 to 5 feet.) These new ornamental sunflowers are excellent for garden planting for screening unsightly places and also for bouquets.

Helianthus Globosus (Double). Fl of rich saffron color. Pkt., 10c. Flowers are large, double and

or rich sailron color. Pkt., 10c.

RED SUNFLOWER. Horticulturists have been trying for years to get a Red Sunflower. They have now come very near it, red flowers tipped with yellow. This is a decided novelty and will please you. Pkt. 10c.

HELICHRYSUM MONSTROSUM. (18 inches). Good shape, size and of desirable colors—yellow, sulphur, cream, white, pink, rose, and crimson. Bloom from July until destroyed by frosts. Pkt. 10c.

HELIOTROPE. House plant. Highly valued for the blue color and fragrance of the clusters of small saucer-shaped flowers. Can also be sown outdoors in May. Pkt., 10c.

HOLLYHOCKS. P-4. (5 feet.) They require a deep rich soil. Hardy. double. Pkt., 10c.

ICELAND POPPY (Papaver Nudicaule). P-4. (1½ feet.) Dwarf neat habit, forming a tuft of bluish green fern-like foliage. Blooms all summer. Pkt., 10c.

ICE PLANT (Mesembryanthemum Crystallinum). A-1. (6 inches.) A dwarf plant of trailing habit. The surface of the foliage is covered with particles resembling crystals of ice glistening in the sun. Pkt., 10c.

JOB'S TEARS (Coix Lachrymae). A-1. (3 feet.) Curious ornamental grass from East Indies, with broad, corn-like leaves and seeds of a light slate color. Beads are sometimes strung from the seeds. Pkt., 10c.

LANTANA P-4. Shrubbery plant producing clusters of flowers which constantly change their color. May be grown in pots or set out in summer. They have an agreeable aromatic perfume. House plant. Pkt., 10c.

LARKSPUR (Delphinium Ajacis Annual). A-2 (2 to 3 feet.) The annual varieties include the rocket hyacinth-flowered larkspurs, so called from their long, narrow flower spikes. Tall Mixed, Dwarf Mixed. Pkt., 10c.

LINUM GRANDIFLORUM RUBRUM (Scarlet Flax). A-1 (18 inches.) The flowers are deep crimson with black centers and saucer-shaped. Pkt., 10c.

OBELIA. A-1. (6 inches.) Make a neat and effective edging for geraniums and ornamental leaved plants; pretty for baskets and vases and porch boxes. Colors are deep blue and blue marked with white. Pkt., 10c.



MARIGOLD-YELLOW SUPREME

MARIGOLD A-1

Bears a profusion of flowers of brilliant shades of yellow marked with maroon and brown. They are about 11/2 inches in diameter.

Yellow Supreme. Large flower of rich lemon yellow color. Sweet scented. Plants vigorous and foliage has very little of Marigold odor. Pkt., 15c.

Dwarf Double French. Pkt., 10c.

Guinea Gold. Produces a compact plant literally covered with blossoms often measuring 2½ inches across that somewhat resemble a large carnation. The color is a brilliant golden orange, and quite free from the usual Marigold odor. Height 2 feet. Pkt., 10c.

Tall Double African. Pkt., 10c.

Tall Orange Prince. A new Marigold. Bears enormous orange-colored flowers of the quilled type. It is hardy, à free bloomer and a most satisfactory variety. Pkt., 10c.

MIGNONETTE A-1

(1 foot.) Fragrant blossoms continuously through the summer and until after severe frosts. This can also be grown in pots for winter flowering.

Sweet Grandiflora. Large flowering, very fragrant. Pkt., 10c. Golden Queen. Golden yellow color. Pkt., 10c.

MOURNING BRIDE (Scabiosa Atropurpurea). A-1. (18 inches.) These hardy annuals show a great variation of color, and the long stems and keeping qualities of the blossoms make this one of the best annuals for bouquets. Pkt., 10c.



not pull apart easily, they may be cut, but be sure you do not cut through an eye. Replant the new divisions about 2 feet apart.

If in doubt how to divide perennials, wash the soil off the roots with a clear view of the type root and the task is simplified.

Try to do all the dividing and planting of perennials before it is so warm they must be protected from the hot sun. The plants will have a better chance of survival and require less care.

The most experienced gardener knows, and the beginner will soon learn the established garden of perennials will have times of scarce bloom. Therefore, some annuals and biennials mixed with the perennials will fill these gaps. It is not important what is growing, only how it is growing. The new gardeners with an-

nuals in a neat well cared for border have every reason to feel as proud of their flowers as does the owner of the most established garden in the neighborhood.

No need for the new home owner or renter to be without the pleasure of raising flowers when annuals grow so easily and quickly. Very few annuals are temperamental. But if you feel you can not grow anything else, plant Zinnias. Plant the taller types at the back of the border and the lilliputs in the center with a border of Petunias. The lavenders, pinks to whites of the Petunias blend very well with the more vivid colors of the Zinnias as well as with the pastel Zinnias now available. You will be so proud of your effort next year you will try something else, and before long you will realize you only thought you could not grow flowers. Be sure to not have the larger

NASTURTIUMS A-1

Scarlet Gleam. Dazzling in color, delightfully sweet scented, Superior in type, extra large double flowered. Pkt., 10c; oz., 25c.

Gleam Hybrids. New double sweet-scented Nasturtiums. The flowers are large and practically 100% double. The color ranges from cream yellow to scarlet and deep maroon, with some spotted varieties. Pkt., 10c; oz., 25c.

Golden Gleam. Flowers are large, double, sweet-scented, of brilliant golden yellow, and borne on large stems well above the bright green foliage of the dwarf, bushy plants. Pkt., 10c; oz., 25c.

Tall Nasturtiums. (Average height 5 feet.) Besides their ordinary garden use for trailing over fences, trellises, stone walls, etc., the climbing nasturtiums can also be grown as pot plants for winter-flowering, hanging baskets and vases. Tall Mixed, All Colors, Pkt., 10c; oz., 20c; 1/4 lb., 70c.

Dwarf Nasturtiums. (1 foot.) These plants have a neat, compact habit of growth and attractive foliage, and are excellent for borders. They bloom constantly throughout the season. Dwarf Mixed, Pkt., 10c; oz., 20c.

NICOTIANA AFFINIS A-1

 $2\frac{1}{2}$ to 3 feet.) Belongs to the tobacco family. Plants are in full flower every sunny day from June until frost. Blossoms trumpet shaped, on tall stems in colors of blue, red, and rose. Pkt., 10c.

Nicotiana Sanderae. (2 feet.) A lovely hybrid of elegant branching habit, bearing rosy flowers on long graceful stems. Pkt., 10c.

NIGELLA DAMASCENA (Love-in-a-Mist or Devil-in-the-Bush. (2½ feet.) Plants are compact, with fine cut foliage, which blooms profusely. Colors are blue and white. Pkt., 10c.

ORIENTAL POPPY (Papaver Orientale. P-4. 2 to 3 feet.) Unequaled for brilliancy of color. The flowers are of enormous size, often 6 inches in diameter and the colors range from soft pink to dazzling scarlet to deep maroon. Pkt., 10c.

PANSIES A-1

Barteldes Giant Market Pansies. This strain is the result of many years of careful breeding and selection. Flowers are of immense size, and very rich coloring. Plants bear an abundance of giant blossoms. Pkt., 15c.

Trimardeaux Giant Mixed. Pkt., 10c; 1/4 oz., \$1.00.

Good Mixed. A very good strain of all colors. Excellent for bedding. Pkt., 10c; $\frac{1}{4}$ oz., 80c.

PETUNIAS A-2

Annual. All of the single-flowered varieties of Petunias can be easily grown from seed. They are attractive in beds and masses, serve well for broad borders or bands, and thrive in window boxes.

Rosy Morn. Very beautiful rose color. Pkt., 15c.

Pink Glory. Pure flame rose pink. Flowers slightly ruffled. Pkt., 25c.

Royal Purple. Ruffled flowers of rich velvety purple. Pkt., 25c. Single. Mixed. Pkt., 10c.

Giants of California. Produce immense blossoms. Pkt., 30c. Striped and Blotched. Mixed. Pkt., 10c.

PHLOX DRUMMONDI GRANDIFLORE A-1

(1 foot.) The Phlox Drummondi is sometimes called the flame flower. Very easily grown, gives a quick return of bloom and offer a large variety to choose from. Mixed. Pkt., 10c.

Mixed. Pkt., 10c.

Phlox Alba. White. Pkt., 10c.

Phlox, Star or Quedlinburg. Flowers are star-shaped and very attractive. Pkt., 10c.

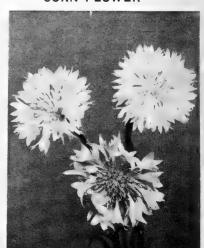
PERENNIAL PHLOX. P-4. For permanent beds in the garden, and borders. Bear immense flowers. Pkt., 10c.







CORN FLOWER



plants growing closer than 24 inches apart, and the smaller ones 18 inches apart. Good circuluation of air is essential for good diseasefree foliage.

After the frost is out of the ground, it is time to plant annuals and biennials. Refer to culture A, AA and B for this.

I very often plant flower seed in the vegetable garden and transplant later to the flower border. When this method is followed, it is a good idea to plant the seed in rows and after watering the seed lightly, cover the seed with a board. This prevents the seed drying out and the new seedlings are not pulled up when the board is removed as sometimes happens when burlap is used. Of course, a careful watch is necessary, and when the new plants appear, lift the board a few inches above the seedlings. The board will protect them from late frost and being accidentally stepped on. Transplant as many as needed for the flower border but if possible leave some of the plants to bloom in the vegetable garden, to be used for cutting and thereby helping to keep the flower border looking neater. By growing flowers especially to be used for cuttings, the flower border has a neater appearance but it is necessary to pick all the old blooms off to

keep most flowers blooming their best. Even most perennials will bloom more than once and some bloom until frost if they are not permitted to go to seed. Since it it so easy to divide perennials, it is foolish to permit their strength to go into producing seed, when it probably would not come true anyway. Especially is this true of perennial phlox. If phlox is permitted to reseed and to crowd out the better varieties it will not be many seasons before you are wondering what became of all the good colors once growing there, as there will only be the magenta left.

June is a good time to start cutting of shrubs, roses and perennials you wish more of in your garden. Cut off about eight inches, just below a leaf bud, insert it in sandy soil, moisten it well, and turn a glass jar over it, press the jar well into the soil to prevent the soil drying out. Do not permit the soil to become dry at any time. If the planting is made in a shady place, it is easier to keep damp. If you are not sure what will root in this manner, try anything. This can be continued into August. Some things root easier in the early season and some do better later, so if you do not succeed the first time, try again. And do not forget to plant perennial seed at this time.



PINKS A-1

(Dianthus)

(1 foot.) A popular class of flowers which should be used more generally in garden culture. Blooms constantly from July until frost and if covered, will bloom again second season.

Chinensis (Double China). Mixed. Pkt., 10c.

Laciniatus (Double Imperial.) Mixed. Pkt., 10c.

POPPIES A-1,

They bear so profusely and are of such brilliant colors that they are especially valuable for mass planting. The annuals should be planted early in the spring and not transplanted.

Single and Double Poppies. Mixed. A fine collection of all the best annual varieties. .Pllant these in a mass or row and you will get a beautiful effect. Pkt., 10c.

Shirley Poppy. The flowers range from pure white to maroon with all intermediate shadings. Of easy culture and free bloomers. Pkt., 10c.

PORTULACA A-2

(Moss Rose or Sun Plant)

These trailing plants love the sun and stay close to the soil. Round flat flowers with vivid shades of red, yellow, pink, and white. Fine for massing in beds, edging and rockwork.

Single Mixed. Pkt., 10c. Double Mixed. Pkt., 10c.

PYRETHRUM AUREUM. A-1. A beautiful bedding plant with golden leaves, called Golden Feather. Pkt., 10c.

PYRETHRUM ROSEUM (Insect Powder Plant). P-4. (2 feet.) Hardy, heraceous garden plants with large single or double flowers. The colors are rose, pink, white, and crimson. Pkt., 10c.

SALPIGLOSSIS. A-1. These are very showy bedding or border plants with richly colored funnel-shaped flomers which are borne on long, graceful stems. The flowers are of purplescarlet, yellow and blue. Pkt., 10c.

SCHIZANTHUS. A-1. (18 inches.) Flowers are dainty, often called the Butterfly Flower. They come into bloom very quickly and are splendid for borders, gardens, and also for cut flowers. Pkt., 10c.

SHASTA DAISY. P-4. (15 to 18 inches.) Fine when planted in the old fashioned garden, and valuable as a cut flower. Pkt., 15c.

STOKESIA CYANIA (Cornflower Aster). P-4. (1½ to 2 feet.) Flower freely from early July until frost. The flowers resemble the cornflower in shape but are much larger and of a beautiful lavender-blue color. Pkt., 10c.



COSMOS



COREOPSIS



ANNUAL SWEET WILLIAM



SALPIGLOSSIS



Summer may bring dry weather. If so, the best thing to do is mulch. More people are using mulches every year. Mulch will save more time than anything you can do to lessen garden work. For best results, mulch should be at least two inches deep. I prefer peat moss. It is satisfactory and attractive. Some mulches are satisfactory but very unsightly, but do try mulching, it conserves moisture and discourages weeds. What more can be said?

When watering becomes necessary, be sure to do a thorough job. Water deep enough to get the moisture down to roots. If the moisture is just below the surface, the roots will come up to get it, making the plants shallow rooted and more succeptible to burning out. One of the most satisfactory ways of deep watering is by using a soil soaker.

If the summer garden program was to be summed up in a few words, it would be, water deeply, weed, mulch, and keep old blossoms picked off. When you are weeding and there are no seeds on the weeds, do not throw them away, rather place them about the stalks of a plant where they will not show, and will put food back into the ground where it is needed, also conserve moisture, and you will feel as a gardener you have come of age.

Iris can be divided any time after they are through blooming, and when there is a lull in other chores, get the job done.

As fall comes on try to get the perennials divided, if they need it. This must be done early enough for them to become established in their new location. Newly planted perennials should be mulched to prevent them heaving. More established root systems may not need it.

Weed all flower borders well, so they will have a neater appearance all winter. Cut the grass as short as the mower will cut. This will give the newly sown grass seed a better chance to become established if not shaded by long grass.

Be sure to give the walks and flower borders, as well as around the shrubs, a good sharp edge. This does not mean an edge deeper than an inch or two, or should the soil be rounded up. Just a nice level bed with good sharp edges, say, "we cultivate to here." By doing this in the fall the yard looks neater all winter and is easier to care for the coming vear. So let's leave the yards looking nice as possible as we put them to bed for the winter.

I hope you have a good season, and are planning even greater wonders to perform next year. Good luck to you all, and if possible, be listening for "Leon, Your Gardening Girl Friend."

Good bye now.

SWEET PEAS-Annual A-1

Mixed Early Flowering Spencer Sweet Peas. The blooms are large, waved and ruffled, giving them a very attractive and distinct appearance. These are in bloom three weeks before the Standard Spencers, and they still have the same long stems and large flowers and long season of bloom. Pkt., 10c; oz., 20c; 1/4 lb., 75c.

Late Flowering Spencer Sweet Peas. A splendid mixture of the best Spencer variety. They have long, strong stems with blooms of ruffled and waved flowers that appear almost double. Pkt., 10c; oz., 15c; 1/4 lb., 55c.

SWEET SULTAN (Centaurea Moschata). A-1. (2 feet.) The flowers are exquisitely fringed, 3 to 4 inches across, borne on long stems and are very fragrant. In bloom from July until October. Pkt., 10c.

SWEET WILLIAM (Dianthus Barbatus. P-4. (1 foot.) It does not flower until the second year from seed; commences blooming in early summer and continues to flower for several weeks. Pkt., 10c.

TEN-WEEKS STOCKS (Cut and Come Again). Cheiranthus Mattiola). A-2. (1 to 2 feet). The flowers look like small rosettes, appear on long stalks, are exceedingly fragrant, and are of all colors. Pkt., 10c.

ERBENAS. A-1. One of the most popular bedding annuals. The flowers are of very bright colors produced from June until frost. Pkt., 10c.

VINCA (Periwinkle or Old Maid). P-4. (1 foot.) Glossy green leaves, red and white flowers. Flowers from seed the first season and if taken into the house before frost will bloom all wintre. Pkt., 10c.

VIOLET. P-4. (5 inches.) They bloom sooner than most other flowers and their fragrance is delightful. They will thrive in shady places. A violet bed around the foot of a big tree is very attractive. Pkt., 10c.

/ALLFLOWER. P-4. The coloring runs mainly to rich yellow, orange and purple, and is oriental in effect. Fine for indoor culture. Double, Pkt., 10c; Single, Pkt., 10c. WALLFLOWER.

ZINNIAS A-1

Hybrid Zinnias. The flowers are large, fluffy and ruffled, larger than the Dahlia Flowered. Petals are attractively curled like chrysanthemums. You'll be delighted with these both for beauty in the garden and for cut flowers. Be sure to give each plant plenty of room. Mixed colors. Pkt., 25c.

olossal Zinnia. Flowers are of immense size and thickly set with velvety petals. Plants are healthy, vigorous, branching freely and make excellent material for masses or cutting. Red, white, yellow, pink, or mixed. Pkt., 10c. Colossal Zinnia.

Fantasy. Award of Merit in the All American Flower Selections for 1935. The medium size chrysanthemum-like flowers are composed of shaggy ray-like petals that are borne on long stems. They come only in mixtures, but cover a wide range of color from the brightest red and orange to the popular pastel shades of pink and cream. Height 2 feet. Pkt., 10c.

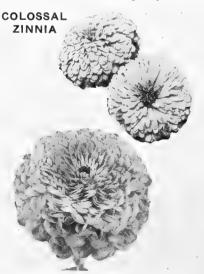
Zebra Zinnia-Striped. Like Zebra and very attractive. Pkt., 10c.

Dahlia Flowered Zinnia. This is a new giant flowered type, the petalls overlapping in such a manner as to give the blossoms the appearance of a decorative dahlia. The colors of this type are not so brilliant as the others, but are soft shades of lavender, rose and old gold. Red, yellow, white, pink or mixed. Pkt., 10c.

Pompon or Miniature Zinnia. A dainty and ornamental Zinnia which is very useful for borders. They come in all beautiful shades of coloring of the tall Zinnias and the flowers are just as perfect in form. Pkt., 10c.

Double Mixed Zinnias. The petals of these flowers are peculiarly quilled and twisted, giving the flowers a distinct appearance. Pkt., 10c.

CHINESE WOOLFLOWER. A-1. (2 feet.) The flowers resemble balls of tufted wool. From early summer until late fall there are countless flowers. We offer this in Red, Pink or Yellow. Please specify color. Pkt., 15c.



DAHLIA-FLOWERED ZINNIA



CLIMBERS

It is best to not transplant these.

ANNUAL CLUMBERS—Mixed. A splendid mixture of pretty flowering, climbing annuals. Pkt., 10c.

BALSAM APPLE and PEAR. Annual. Curiously shaped golden yellow fruit which opens when ripe and shows the seed. Either Apple or Pear. Pkt., 10c.

CANARY BIRD FLOWER (Tropaeolum Canariense). Annual. Well known climbing annual with elegantly fringed bright yellow flowers. Pkt., 10c.

CARDINAL CLIMBER. Annual. Has beautiful fern-like leaves and is covered from mid-summer to frost with brilliant, fiery red flowers. Pkt., 10c.

CLEMATIS. Perennial. Usually grown from roots, but can also be started from seed. Pkt., 10c.

CLIMBING BLACK-EYED SUSAN (Thunbergi Alatum). Annual. (4 feet.) Beautiful tree flowering tender annual twiner of rapid growth. Flowers are buff, white, and orange. Pkt., 10c.

CONVOLVULUS (Morning Glory)

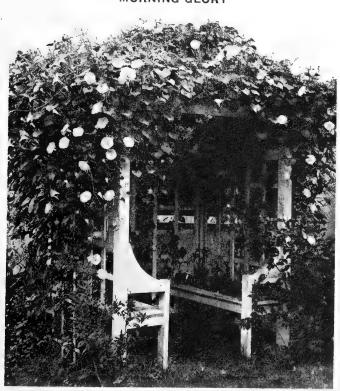
Tall Morning Glory (Convolvulus Major). (Annual.) (10 feet.) It soon covers a fence or trellis with abundant foliage and bright flowers. Pkt., 10c.

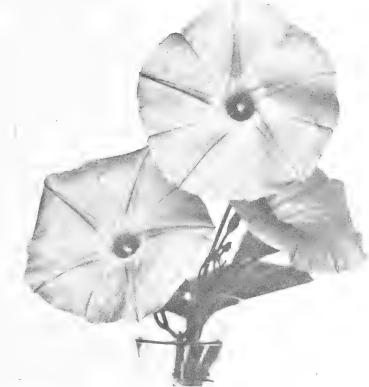
Dwarf Morning Glory. (Annual). The flowers are of rich shades of blue rivaling the pansy for beauty. Blossoms from July until frost. Pkt., 10c.

Mammoth Blue Morning Glory. (Annual.) Beautiful large blue flowers which make a wonderful display when in bloom. Pkt., 15c.

Scarlett O'Hara. Large soft scarlet flowers borne in great profusion. Flowers remain open longer than most morning glories. Pkt., 15c.

MORNING GLORY





MOON FLOWER

CYPRESS VINE (Ipomoea Quamoclit). Annual. (15 feet.) Very delicate fern-like foliage, and masses of beautifull small starshaped flowers. Pkt., 10c.

EVERLASTING SWEET PEA. Perennial. A perennial climber producing a succession of white, rose, and purple blossoms. **Pkt.**, 10c.

HYACINTH BEAN (Dolichos Lablab). Annual. (Usual height 10 to 20 feet.) Splendid climbers with abundant cluster spikes of purple and white flowers. Pkt., 10c.

KUDZU VINE (Pueraria Thunbergiana. Perennial. The most rapid growing plant we have ever seen. Leaves resemble those of a lima bean and the foliage is very dense. Pkg., 10c.

MOONFLOWER (Ipomea Mexicana). Annual. Beautiful waxy flowers open at night and on cloudy days, and their fragrance is delightful. Either white flowered or blue flowered. Pkt., 10c.

PASSION FLOWER (Passiflora Coerulea). Annual. Attractive purplish blue flowers, blooming profusely for several months. A native of tropical South America where it climbs from tree to tree. Pkt., 10c.

GOURDS

Annual. (10 to 20 feet.) Rapid growing, interesting annual climbing plants with ornamental foliage and curiously shaped fruit.

Dipper. A round gourd with a long neck, making an excellent dipper. Pkt., 10c.

Nest Egg. White, egg-shaped. Pkt., 10c.

Sugar Trough. Thick shell makes fine dishes. Pkt., 10c.

Dish Rag. When shelled and seeds removed, inside makes a good dish cloth or bath sponge. Pkt., 10c.

Hercules Club (Also called New Guinea Bean. The fruit is a long club-shaped gourd. Pkt., 10c.

Calabash Pipe. A rapid growing climber from South Africa. The calabash pipes are made from this fruit. Pkt., 10c.

Mixed Gourds. All kinds mixed. Pkt., 10c.



ALFALFA

ALFALFA. Unsurpassed tame hay crop. Puts nitrogen in the soil, especially if inoculated. Some say Alfalfa tea helps arthritis. Now the main source of supply for chlorophyll. What a plant. But we don't recommend that it be planted with grass in pastures, because of the danger of bloating live stock.

The best seed is always the cheapest in the long run. You can always rely on our "Sunflower Brand" shipped out of Lawrence and our "Columbine Brand" shipped out of Denver. They're tops. Your dealer can get them for you.

Sow the variety or type that is best suited to your own local conditions but be sure the seed is free of Dodder, Russian Thistle and other noxious weed seeds.

KANSAS COMMON ALFALFA. In buying Alfalfa seed be sure that you get seed which is adapted to your climatic condition. We recommend Kansas Grown seed for the Middle West with Oklahoma Seed and Utah Seed for second choice. Our best grade of Alfalfa Seed are Kansas grown and Oklahoma grown.

COLORADO COMMON ALFALFA. Grown in colorado and adapted to Colorado climate. We suggest this as first choice for seeding in Colorado.

CERTIFIED BUFFALO ALFALFA. Recommended very highly for the Middle West.

Buffalo and Ranger are new wilt-resistant varieties. We also have Colorado Common, Turkestan, Grimm, Meeker Baltic, New Mexico, California and Arizona Common, Dry Cimarron, Ladak, and Argentine.

CLOVERS

WHITE BLOSSOM SWEET CLOVER (Melilctus alba.) A biennial, grows to a height of from 4 to 6 feet, vigorous grower, extremely hardy and produces abundant pasturage and lots of hay. This is the standard Sweet Clover of the country.

BIENNIAL YELLOW BLOSSOM SWEET CLOVER (Melilotus officinalis.) This is also a biennial, about two weeks earlier that the white, but not quite as tall. Do not confuse this with the annual Yellow Blossom which is of very little value.

HUBAM CLOVER. Annual White Blossom that produces an abundance of hay or green manure the first year.

MADRID SWEET CLOVER. An improved variety of biennial Yellow Blossom Sweet Clover. Produces heavier yields and more valuable hay than Common Yellow Blossom.

RED CLOVER (Trifolium Pratensis.) Be careful to select seed which does not contain Buckthorn. You can depend on our Sunflower and Columbine brands of Red Clover.

WHITE CLOVER (Trifolium Repens.) A hardy perennial, excellent for mixing with Kentucky Blue Grass for lawns and pasture.

ALSIKE CLOVER (Trifolium Hybridum.) Especially valuable for growing on wet or swampy land.

STRAWBERRY CLOVER. A clover that is becoming very popular for use on alkali ground. It makes excellent pasture for live stock and will thrive, when once established, in very wet ground. It will even grow right under water. Five or six pounds will seed an acre.

KOREAN LESPEDEZA

A plant similar to clover and the best of the Lespedeza types. It has an advantage over alfalfa and sweet clover, in that it will grow on untreated soil, no lime or phosphate being needed. Korean Lespedeza can be grazed all spring and summer and hay can be cut or seed taken from the crop in the fall. Agriculturists state their "belief" that this Lespedeza is the "coming legume." Sow 10 to 15 lbs. hulled seed per acre.

LADINO CLOVER

This is a perennial that is presumed to be a large form of White Dutch Clover. It is a low growing leafy plant with succulent and somewhat coarse stems that have a tendency to remain rather close to the ground. Under proper moisture conditions these stems will take root at the nodes, or joints, and in this manner thicken up the existing stand. It is splendid for pasture and makes a good hay crop but is not suitable for lawns. Sow 2 to 4 lbs. per acre.

BIRDSFOOT TREFOIL. Used in pastures. A little slow to get established, but will not bloat live stock. Well recommended because of this.

HAY, PASTURE AND RANGE GRASS SEEDS

- BROME, Smooth. A long-lived perennial which spreads by under ground root stalks, forming a dense sod. Highly palatable. Does well up to 9300 elevation. Should be in all irrigated pastures and does fairly well on dry land. Will form a good sod for ditch banks. Lincoln Brome yields more than common Brome. Sow 20 pounds per acre on irrigated ground; 10 pounds on dry land. Fertilize Brome with Ammonium Nitrate.
- BROME, Mountain. Short-lived perennial bunch grass. Starts early in spring and stays green late in fall. Has excellent reseeding habits. Does well in timberlands. Sow 20 pounds
- ACHENBACHER BROME. A selection by Kansas Experimental Station. This and Lincoln Brome produce more hay and pasture than Canadian Brome.
- LINCOLN BROME. Smooth Brome selected by Nebraska Experimental Station for its abundance of foliage.
- CRESTED WHEAT. The leading dry land grass in the northern section of the West. Crested Wheat Grass is a long-lived perennial of the bunch grass type but tillers profusely. It also does well when irrigated, grows in both light sandy loams and heavy clay soils. Best results, however, are obtained on soils of medium texture. Crested is slightly tolerant to Alkali. It does well up to 8,000 feet elevation and late reports are showing that it is doing good down in Texas. Crested Wheat is palatable to live stock. If cut for hay, it should be cut shortly after heading of just after blooming but before seeds have formed. Sow 6 to 8 pounds per acre in late fall or early spring at a depth of ¾ to 1 inch. Crested Wheat furnishes early and late grazing.
- CRESTED WHEAT GRASS. Fairway Strain. Grows shorter than the Standard strain, has more and finer leaves and produces about the same amount of hay. Can be used for lawred in day continued. lawns in dry sections.
- BLUE GRAMA GRASS. Valuable for reseeding ranges. Resistant to over grazing. Sow 12 pounds per acre in March or April not to exceed ¾ to 1 inch deep.
- INTERMEDIATE WHEAT GRASS. A tall bluish-green sod forming perennial grass that produces a heavy growth of basal leaves. Growth starts early in the spring, and continues on into the summer; greens up in fall after short dormant period. Highly nutritious. Does well on dry land and under irrigation. Drill seed ½ to ¾ inch deep in heavy soils and 1½ inches deep in sandy land. I lant 7 to 10 pounds per acre for solid stands, and 4 pounds per acre for seed production in 40 inch rows.

SUDAN GRASS



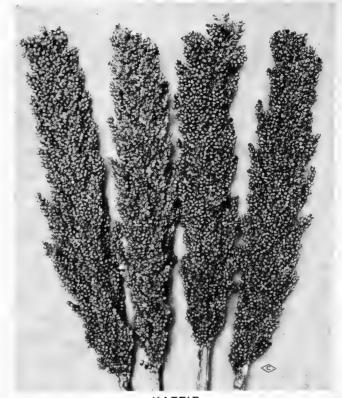
- NATIVE RYE GRASS. A quick growing grass, half annual and half perennial. Excellent for lawns when used with Kentucky Blue Grass, as it grows fast and protects the blue grass. Sow 30 per cent native rye and 70 per cent blue grass.
- MEADOW FESCUE or ENGLISH BLUE GRASS (Festuca Pratensis). Especially adapted for permanent pasture. Succeeds on poor soils, makes good hay earlier than other varieties, cattle thrive on it whether in dry or green state. Withstands dry weather and freezing, and produces an abundant crop of seed. Sow 15 to 20 pounds to the acre..
- ORCHARD GRASS (Dactylis Glomerata). Withstands droughts, grows well in the shade, flourishes in wet or poor ground. Good pasture for cows. Sow 20 to 25 pounds per acre.
- RED TOP GRASS. One of our best native grasses. Especially valuable for sowing on sour or acid soils, swampy or meadow lands, liable to overflow, and on soils that are not rich enough for Timothy and other grasses. Mixed with Alsike Clover makes fine crop of hay or excellent pasture. Fourteen pounds of solid seed to the acre. Should be cut when in full flower. More easily cured than any other grass.
- REED CANARY GRASS. A perennial that will do well in very moist places. Makes good hay and pasture. Sow six pounds per acre. Smothers out weeds.
- SAND DROP SEED. A native dry land grass, good for binding soil and very palatable. Seed is very small and inexpensive. Plant 2 to 3 pounds per acre.
- AND LOVE GRASS. A lush growing, fine stemmed, medium tall bunch grass which produces a high yield of excellent forage. A real beef producer; adapted to most sandy areas in the Great Plains region. Plant 1 to 2 pounds per acre, preferably in the spring. Advisable to mix with Grama where patches of heavy soils are apparent. SAND LOVE GRASS.
- SLENDER WHEAT GRASS (Agropyrum tenerum.) Another good perennial with drought-resisting habits. Produces 1½ tons of hay per acre, which is well liked by livestock.
- UDAN. Used for hay and temporary pasture. Plant 20 to 30 pounds on dry land and 40 to 50 pounds on irrigated. Sweet Sudan has sweeter stalk and is more palatable to livestock. Sudan that has been frosted or damaged by drought or that contains cane-hybrids is dangerous to stock on pasture.
- WEET SUDAN. This was produced by crossing standard Sudan with Leoti Red Sorghum. The result is a hardy variety with heavy, wide leaves and a sweet juicy stalk. It is resistant to drought and foliage diseases. Live stock feeders prefer it to standard Sudan. Give it a try.
- TALL OR ALTA FESCUE. Somewhat coarser than Meadow Fescue and more drought resistant, more productive and more alkali tolerant.
- TALL MEADOW OAT GRASS. A tall, long-lived, deep-rooted perennial that is winter hardy. Height 3 to 5 feet. Requires well-drained, light soils, with medium moisture. Used for hay and pasture.
- TIMOTHY (Phieum Pratense.) Well adapted to spring and summer grazing, greatly relished by all kinds of stock, especially horses. Excellent hay crop. Sow 10 to 12 pounds to the acre.
- TIMOTHY AND ALSIKE (Mixed). Used extensively in the mountain area. We can supply mixtures containing 10 per cent, 20 per cent, 30 per cent, and 40 per cent Alsike.
- WEEPING LOVE GRASS. A high producing grass from South Africa that supports more cattle per acre than most grasses, but not so much gain per head. Not very palatable and not long-lived.
- WESTERN WHEAT GRASS (Agropyrum Smithii). Grows taller than Crested Wheat Grass and produces more hay per acre, but does not provide as much pasturage. A good drought
- TALL WHEAT GRASS.. A tall perennial bunch grass. Shows great promise for hay and pastures under wet, seepy, alkaline conditions, high altitude areas, and more limited use in semi-arid areas. Starts growth in early spring and continues late into summer. Greens up in fall after short dormant period. Very nutritious. Use as a hay or pasture grass in alkaline or wet areas where other wrasses do not produce; in connection with other pastures to extend grazing season because of late maturity; in mixture in low wet ends of waterways; or in low areas subject to flooding or standing water. I'lant 8 to 10 pounds per acre.
- BUFFALO GRASS. A long-lived perennial which spreads by runners. Highly drought resistant. For pastures use 3 pounds per acre mixed with 6 pounds of Grama. For dry land lawns plant one pound to 400 sq. ft. Treated seed hastens reprincipled.

SWEET SORGHUMS

KANSAS ORANGE. Large heavy stalks with abundant leaves. Used for making sorghum.

GRAIN SORGHUM

- ATLAS SORGO. Height of 7 to 10 feet and require from 120 to 130 days to mature. Has a sturdy leaf stalk abundantly juicy and sweet.
- AXTELL SORGO. An improved selection out of Atlas Sorgo. Height 6 to 8 feet and matures in 115 days, about 10 days earlier than Atlas.
- HEGARI (Dwarf). This greatly resembles the Dwarf Black-hulled White Kaffir, but the heads are larger, the stems thicker and more juicy. Grows 4 to 4½ feet tall, matures in 85 to 100 days. Enormous yield and the earliness combine to make a wonderful variety.
- KAFFIR NO. 44-14. A sturdy, hardy Kaffir suitable for combining. A wonderful addition to the sorghum line not only because of its height, which permits combining, but also because of its vigorous growth and its ability to yield well even under adverse conditions of heat and drought.
- WESTLAND MILO. A dwarf variety. This is an improvement over Wheatland Milo in that it is healthier and more resistant to disease.
- MARTIN MILO. It is combine height and should be grown for grain only and not for fodder. It resists drought, matures early, dries quickly, and is unsurpassed as a grain crop.



KAFFIR

PASTURE AND HAY GRASS MIXTURES

Grassland farming is the key to put our soil in condition to produce adequately for mankind's needs. Return farm land of questionable value to grass. Reseeded pastures can support more cattle and produce two to four times as much beef per acre as well managed native range.

IRRIGATED PASTURES

A good mixture should contain at least one productive legume. Dairy cattle are less subject to bloat than beef cattle because of the supplemental feed them receive. We feel alfalfa is a little dangerous to use.

Our Columbine Mixture for irrigated soils is a good mixture for most areas.

Brome Grass10	lbs.
Orchard Grass10	lbs.
Meadow Fescue 5	lbs.
Alta Fescue 5	lbs.
Ladino Clover 2	lbs.
No. of Contractions of Contraction o	
Total pounds per acre 32	lhs

Morton's Mixture is still a popular mixture.

Orchard Grass 10 Brome Grass 10 Meadow Fescue 7 Timothy 4 Yellow Sweet Clover 3	lbs. lbs. lbs.
Total pounds per acre34	lbs.

DRY LAND PASTURES

Our Columbine Dry Land Mixture is suitable for most areas receiving 16 to 19 inches of annual precipitation.

Crested Wheat	4	lbs
Intermediate Wheat	4	lbs
Buffalo	1	lb.
Sand Love	1	lb.

Under poorly drained wet saline conditions the Colorado Handbook recommends:

Brome Grass	. 8	lbs.
Tall Wheat Grass	. 8	lbs.
Strawberry Clover	. 3	lbs.
	19	lbs.
OR		
Reed Canary Grass	.12	lbs.
Strawberry Clover	. 3	lbs.
	15	lhs

Seed beds should be fine, firmly packed, free from weeds and well graded. A shallow cultivation before seeding will destroy weed growth. Seeding can be done in spring or early fall. Drilling is the best method of planting followed by a surface packer. The ground should be kept fairly moist until the grass is well up. It would be best not to graze the pasture the first year.

BARTELDES MIXTURE FOR ALKALINE SOILS

For areas with less precipitation, use Buffalo, Blue Grama and Crested.

Slender Wheat Grass1	0	lbs.
Tall Wheat Grass	8	lbs.
Yellow Sweet Clover	4	lbs.
Strawberry Clover	2	lbs.
Alta Fescue	4	lbs.
Per acre	26	lbs.

HYBRID SEED CORN

If you will compare present corn yields per acre with those of fifteen years ago you will quickly see the reason for the extreme popularity of Hybrid seed corn.

Results count.

There are a great many types and varieties of Hybrid seed corn. We offer those which have proved reliable.

- U. S. NO. 13. Smooth deep-kerneled ears which have a bright orange tinge. Responds to good soil fertility, is wilt-resistant, stalks medium height. Recommended for eastern half of Kansas, Missouri, Nebraska, and Southern Iowa. Matures late.
- MISSOURI NO. 8. This hybrid does well in Kansas, Missouri and Oklahoma. Large, heavy yellow ears. Has a strong stalk with a deep root system. Is heat, drought and insect resistant. Does very well on average soil.
- K-1874. A sturdy, yellow Kansas hybrid of medium maturity. A high yielder with stiff stalks and a wide range of adaptability.
- K-1639. Medium early and can be grown in northern parts of Kansas. Ears rather low on the stalk, making it an excellent corn for mechanical pickers. A good yellow corn.

OPEN POLLINATED SEED CORN

For those who prefer open pollinated seed corn.

REID'S YELLOW DENT 100 Days. Ears medium size, remarkably uniform, a bright yellow color with a deep grain and small red cob.

TREAT YOUR SEED CORN WITH ARASAN

Seed corn treating generally helps protect seed against rotting in the soil and checks forms of seedling blight and root rot caused by certain fungi on corn. Often improves germination, stands and yields.

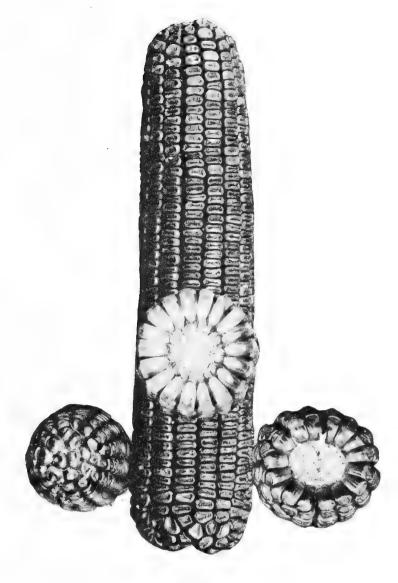
MISCELLANEOUS FIELD SEEDS

SIBERIAN MILLET. Early, hardy, withstands drought.

GOLDEN MILLET. Enormous heads, heavy yield of seed and fodder.

Millet—Sow 60 to 90 lbs. per acre.

- MAMMOTH RUSSIAN SUNFLOWER. Single heads measure 15 to 20 inches in diameter and contain an immense amount of seed. Three pounds of seed will plant an acre.
- SAND VETCH (Vicia Villosa). Sometimes called Hairy, Vetch or Winter Vetch. Valuable for forage and fertilizing purposes.
- CHEROKEE OATS. This new variety is resistant to Victoria Blight, crown rust, stem rust, and smut. Has high test weights, good yields, heads slightly later than Osage. Good combining variety.
- CLINTON OATS. Similar to Cherokee and Nemaha but slightly taller and with stiffer straw. Clinton Oats are resistant to Victoria Blight and are satisfactory in every respect, with the possible drawback that they are late maturing in Kansas.
- LARGE KERNEL BUCKWHEAT. It is early and very productive, with kernels twice the size of any other variety.
- FIELD PEAS. Field peas deserve more general cultivation. They are equal to corn in fattening hogs and are ready for feed several weeks earlier. White seeded.
- FIELD BEANS White Navy. Standard variety of white beans, Medium size. Sow 30 pounds to the acre. For table use.
- FLAX SEED. Largely grown in Kansas for seed. Sow one-half to three-quarters bushel to the acre.
- CANARY SEED. As easily grown as wheat. Requires similar culture, 20 to 30 pounds per acre.
- **DWARF ESSEX RAPE.** Excellent pasture for cattle, sheep, hogs and chickens. Endures cold weath and lasts after ordinary pasture is gone.



U. S. NO. 13

BROOM CORN

- IMPROVED EVERGREEN. This Broom Corn grows about 10 feet high, stands up well, and is entirely free from crooked brush.
- STANDARD DWARF EVERGREEN. This variety grows from 5 to 7 feet tall and produces a good brush.

SOY BEANS

- LAREDO. A small black bean that matures late. About 7,800 seeds to the pound. Oil content, 14.5 per cent; protein 43.9 per cent.
- BLACK WILSON. An excellent hay variety. Medium maturity, flowers both purple and white; pods two to three seeded; shatter easily, seeds black. Oil content 17.0%, protein 44.6%.
- WABASH. A selection from a cross between Dunfield and Mansoy. Medium maturity with two and three straw colored seed to the pod. Flowers are white and pods shatter but little. Oil content 21 per cent, protein 40.3 per cent.
- HAWKEYE. Selection from a cross between Mukden and Richland. Early in maturing. Flowers purple. Pods two and three seeded and medium in shattering. Oil content 20.6 per cent, protein 41.2 per cent.
- LINCOLN. Selection from a cross between Mandarin and Manchu. Matures early. Pods with two to four seeds and shattering but little. Flowers white. Oil content 21.7 per cent, protein 39.5 per cent.

SEE OUR FIELD SEED PRICE LIST FOR PRICES OF SEED CORN AND ALL FIELD SEEDS.

ACME INSECTICIDES-The standard for many years Full directions on each package

ACME ALL ROUND SPRAY

WONDERFUL FOR ROSES Flowers, Fruit Trees, Shrubs and Vegetables.

Combining two insecticides and two fungicides, if used regularly, one or more of the active elements are always at work. 1 lb., \$1.10; 4 lbs., \$3.50.

ACME 6% CHLORDANE DUST

Simply sift on lawns and in the garden for controlling ants, lawn moths, chiggers, cutworms, ear-wigs, grubs. Excellent for spotting along baseboards, or crevices in homes to eliminate ants, cockroaches, silverfish, crickets and box elder bugs. 1-lb. sifter carton, 60c; 4-lb. bag, \$1.50.

ACME 5% LINDANE SPRAY

For fast control of aphis, thrips, plant bugs, caterpillars and most all common beetles and bugs infesting azaleas, roses, other flowers, shrubs, vines, fruits and vegetables. Kills three ways, by contact, with vapors and as an internal poison. 4 oz., 80c; pint, \$2.70.

ACME TOMATO DUST

Acme Tomato Dust is especially fomulated for tomatoes, controlling blights and worms and permitting best possible harvest. 1-lb. sifter, 60c; 4-lb. bag, \$1.50.

ACME DUSTING SULPHUR

Light dustings (or sprayings) furnish a protective coating on roses and many other foliage plants against mildew and spot. Effective against red spider and certain mites on evergreens, legumes, deciduous and citrus fruits. 2-lb. sifter, 59c each.

BLACK LEAF 40

A contact spray to kill green and woolly Aphis, Plant Lice, Red Spiders, Cabbage Aphis and Onion Thrips. It is especially effective for the green Aphis or Plant Lice on Roses, Sweet Peas, Shrubs and Apple Trees. "Black Leaf 40" is excellent for dipping animals and controls sheep ticks and lice on sheep, cattle, hogs and other animals. "Black Leaf 40" painted on the roosts of your chicken house will release fumes which will penetrate the feathers of the birds and kill all body lice, without any interference with egg production nor any discomfort to the birds.

1-oz. bottle, 36c (makes 3 to 6 gallons of spray); 5 oz., \$1.05; 1 lb., \$2.42; 2 lbs., \$4.15.

BERRY-SET

For Strawberries, Raspberries, Blackberries and Holly berries.

Just mix with water and spray the open blossoms. Makes more, larger and better berries. 1/2-oz.—makes 2 gallons, 25c; 1 oz.—makes 4 gallons, 50c; 3 oz.—makes 12 gallons, \$1.00.

ACME DIMITE

Red spiders and other mites often ruin evergreens, stunt blossoms and can even destroy fruit crops. These tiny forms, hardly distinguishable with the naked eye, reproduce in such unbelievable numbers that they can raise havoc by sucking juices from the host plant. Acme Dimite kills mites quickly and gives protection for several weeks. 2 oz., 69c.

ACME GARDEN GUARD

America's favorite rotenone dust for vegetables and flower gardens. Safe to use on edible portions of plants right up to picking time. Kills most common garden insects of both sucking and leaf chewing types. No mixing, no muss—shake from sifter package hitting insects to be controlled. 1-lb. sifter, 50c each; 4-lb. bag, \$1.00.

ACME WEED KILLER

A universal weed killer toxic to all forms of plant growth including trees. Gets rid of unsightly weeds in driveways, parking areas, flagstone terraces, clay courts, where no vegetation whatever is desired. Pint, 65c; quart, 90c; gallon, \$2.40.

PESTROY-25% DDT

A liquid concentration of DDT—dilute with water and use. A contact poison killing both sucking and chewing insects on foliage. It has good residual effect for controlling flies and mosquitoes in barns (except dairy barns) and around other buildings. 1 gallon makes 5 gallons of 5% spray. Quart, \$1.49; gallon, \$4.69.

ACME STOP

A sticky compound to band adult thick-barked trees to prevent insects such as wingless female canker worm moth from crawling up the tree to lay eggs. 1 lb., \$1.05; 7½ lbs., \$6.25.

ACME PARIS GREEN

A powerful and quick-acting arsenical insecticide used in controlling leaf eating insects. 1/4 lb., 25c; 1 lb., 75c; 5 lbs., \$3.35.

ACME ARSENATE OF LEAD

Thoroughly reliable in killing eating insects which destroy foliage and attack fruits. When worked into lawns and other turf, grubs, worms, etc., are killed and the turf "proofed" against insects for some years. Treatment discourages germination of crabgrass seeds. 1-lb. bag, 68c; 4 lbs., \$1.86.

ACME BORDEAUX MIXTURE

This mixture is the standard copper fungicide that has given fine satisfaction for over a hundred years. As Bordeaux is a preventive, spraying should start early before fungus spores gain foothold. 1 lb., 50c; 4 lbs., \$1.35.

ACME DURADUST #50

A finely divided, wettable powder containing 50% technical DDT. Kills both sucking and chewing insects on foliage, houseflies and mosquitoes by wall treatment. Most economical form to buy DDT. 1 lb., 90c; 4 lbs., \$2.40.

ACME LIME SULFUR (DRY)

It is a favorite spray in control of scale, mites, peach leaf curl, mildew on fruit trees, berry bushes, and as clean-up spray on roses. 1 lb., 60c; 5 lbs., \$2.50.

ACME RED RIVER POTATO MIX

Why mix two or three sprays together to get all the bugs and blight attacking potatoes. Red River Potato Mix does that for you all in one package. 1 lb., 80c; 4 lbs., \$2.60.

ARAMITE—15W

Controls Red Spider and other mites on evergreens, roses, shade trees, nursery stock, ornamentals, apples, grapes and peaches. Safe, sure, easy to use. Just mix with water and spray. 4-oz.—makes 16% gallons, \$1.00; 10 oz., \$2.00.

Blossom-set

For TOMATOES

Grow EARLIER, larger, meaties, more delicious TOMATOES.. more on each plant.. with No-Seed BLOSSOM-SET, approved hormone spray that's easy to use. Just mix with water and spray. No-Seed BLOSSOM-SET stops blossom-drop; makes blossoms set fruit chemically. Tomatoes ripen two to four weeks earlier. Fruits are larger, firmer, more delicious flavored. Many are SEEDLESS because fruit is set chemically, not by pollen. Excellent for STRAWBERRIES, peppers, cukes, etc. Tested by U.S.D.A., leading universities, Florida and Colorado Experimental Stations, many others.

4-oz. bottle (makes 1 gal.), 75c; pint (makes 4 gal.), \$1.75;

DU PONT SEED DISINFECTANTS

NEW IMPROVED CERESAN. A new low cost grain disinfectant. Costs only $1\frac{7}{8}$ to $2\frac{1}{3}$ cents per bushel. Unusually effective in controlling bunt or stinking smut of wheat, covered smut and stripe of barley, and oat smuts. One pound treats 32 bushels of wheat, oats or barley. 1-lb. tin, \$1.30.

CERESAN M. May be used as a dust on wheat, oats, barley, rye, sorghum, millets, cotton, flax, peas and sugar beets. Recommended as a Slurry on wheat, oats, barley, rye, flax sorghums and acid-delinted and mechanically delinted cotton seed. 14-oz. can, \$1.25; 3-lb. can, \$3.55; 40-lb. drum, \$35.85.

2% CERESAN. A dust disinfectant for cotton, flax, millets, peas, kaffir, mile and other sorghums. $1\frac{1}{2}$ -lb. tin, \$1.75.

SEMESAN for Vegetable and Flower Seeds. May be applied as a dust or liquid and is harmless to the seed. It is effective in controlling damping-off of seedlings and cuttings. Full particulars in can. 2-oz. can, 60c; 12-oz. tin, \$2.85.

ARASAN for corn, sorghums, grass seeds, peanuts, soybeans, rice and vegetable seeds. Usually reduces losses from seed decay and damping-off. Two way action—as a seed disinfectant, generally destroys many surface seedborne organisms; as a protectant, generally protects seeds against soil-borne organisms responsible for seed decay. 34-oz. pkg., 25c; 8-oz. can, \$1.00; 2-lb. can, \$3.20.

HOTCAPS

For EARLIER, BIGGER, SAFER CROPS



HOTKAPS are waxed paper cones, easily set out in quantity over seed or growing plants. They guard against rain, frost, cold, wind, hail, birds and insects, and maintain perfect mulch. Growth is forced and yield is increased 10 to 25 per cent. Crops mature 2 to 3 weeks earlier, and bring premium prices.

Write for Free Books

1,000 lots, \$18.35; 5,000 lots, \$18.20 per M; 10,000 lots, \$18.05 per M; 250 Pkg. with Fiberboard Setter, \$5.90; 100 Pkg. with Fiberboard Setter, \$3.15; 25 Home Garden Pkg. with Setter, 95c; Steel Setters, \$1.95; Fiberboard Setters, 20c.

TWIST-EM'S

TWIST-EM's are dark green in color, made of waterproof material that maintain their appearance and ability to shed water and resist all weather conditions over a long period of time.

You'll find these very convenient and very economical.

Package of	200	4-inch	sìze25c
Package of	100	8-inch	size25c
Package of	100	16-inch	size50c

NITRAGIN

BUILD UP YOUR SOIL Inoculate Your Legumes With NITRAGIN
Inoculate your Legume seeds even the planted on fields that have been inoculated before. Field tests have shown that better crops are harvested when Legume seeds are inoculated even when planted on fields where inoculated seeds of the same Legume crops had grown the previous year.

NITRAGIN INOCULATION PRICES

When Ordering, ALWAYS State Name of Seed COMBINATION (AB) LESPEDEZA-Hulled or Size Unhulled Retail Retail 100 lb. size (Inoculates up to 100 lbs. seed) ... \$.55 Sweet, Bur, Hubam Clovers PEANUTS, COW PEAS 1 bu. ea. \$.55 2 bu. ea..... \$.40 CI OVERS Red, Alsike, Crimson. White and Ladino SOYBEANS (All Varieties, Including Edible) 1 bu. ea. \$.55 PEAS (All Varieties) **VETCHES (All Varieties)** 100 lb. size (Inoculates up to 100 lbs.) ea.....\$.50 **GARDEN SIZE** Garden Peas and Beans Sweet Peas, Lupines and BEANS-Nawy, Pinto, Wax, Edible Soybeans

MO-GO

NITRAGIN - Oldest and Most Widely Used Inoculator in America

Enough for 8 lbs. seed Retail Price 15c each.

String, Kidney, Gr. Northern

1 bu. ea. \$.55

A guaranteed Mole and Gopher killer. It really gets them. $\frac{7}{8}$ oz., 45c; $\frac{3}{2}$ oz., \$1.00; 1 lb., \$3.50.

GOODRICH

KOROSEAL GARDEN HOSE

Guaranteed 10 Years

Fire-polish finish in bright red and green. Will not swell, warp, buckle, check or rot in normal service. Will not become sticky in hot water, or cannot be harmed by oil, grease and most solvents or chemicals. Guaranteed for ten years. 25 feet, \$5.75; 50 feet, \$9.80; 75 feet, \$13.85. All 5%-inch with couplings.

THE "CYCLONE" SEED SOWER



A VERY POPULAR SEEDER AND VERY EXTENSIVELY USED.

It is guaranteed to sow perfectly even all varieties of farm seeds such as clover, timothy, red top, alfalfa, lespedeza. sudan grass, oats, rye, millet, wheat, buckwheat, turnip, lawn grass, etc., and can be regulater to sow any amount per acre. This machine is strongly built and

mechanically perfect. The bag holds about one-half bushel of seed. It is easily operated. Weight each, 4 lbs. Price, each, \$4.30.

FERTILIZERS

For Better Lawns, Flowers, Vegetables and Farm Crops





PLANTABBS build up resistance to sunless days and indoor temperature changes, assuring abundant foliage and glorious flower coloring!

It's easy to grow green, leafy plants, gorgeous flowers, lovely roses and big-yield garden vegetables. Feed them PLANTABBS!

PLANTABBS are clean, white tablets, providing in highly concentrated form the complete, balanced meal plants need, plus Vitamin B¹. RESULTS GUARANTEED OR MONEY BACK! 25c, 50c, \$1.00 and \$3.50 sizes.

HYPONEX

When dissolved in water is instantly available to plant roots as food.

. Wonderful for African Violets.

1 oz., 10c; 3 oz., 25c; 1 lb., \$1.00; 10 lbs., \$8.00.

ARMOUR

VERTAGREEN

PLANT FOOD

VERTAGREEN is a high quality, scientifically blended and balanced plant food, excellent for obtaining more prolific growth of lawns, flowers, shrubs, trees, fruits and garden vegetables. Clean, odorless, easy to apply. Contains nitrogen, phosphorous and potash, besides several other



important plant food elements. Used with outstanding success on thousands of beautiful lawns and gardens. Vertagreen feeds plants three ways: (1) develops better root systems; (2) builds sturdier stems and leaves; (3) makes finer flowers, fruits, vegetables.

ANALYSIS-5-10-5

FEEDS 3 WAYS

5	lbs	\$0.53
10	lbs	
25	lbs	1.70
5	0 lbs	\$2.80
10	0 lbs	4.55

F. O. B. Lawrence

MILORGANITE

Natural All Organic Fertilizer

By using this safe and dependable organic fertilizer, you can carpet your lawn with a beautiful and dense sward of turf. Grass will stay green longer. You can grow more delicious vegetables, gorgeous flowers, better trees, and nicer shrubs.

Milorganite is organic, does not burn: clean and easy to handle, and is long-lasting.

RETAIL PRICES

25 lbs\$1.55	50 lbs\$2.60	100	lbs\$4.40
	F. O. B. Lawrence		

Golf Clubs use more Milorganite than any other fertilizer. Use their prescription and have a greener lawn.

RAPID GROW

The Pioneer in foliage feeding.

For most plants use one level teaspoonful to one quart water.

One pound makes 176 pounds liquid fertilizer.

Guaranteed analysis: Nitrogen 23%, Phosphoric Acid 21%, Potash 17%.

Add to liquid sprays or to liquid weed killer and do two jobs at once.

2 oz., 25c; 6 oz., 50c; 8 oz., 69c; 1 lb., \$1.25; 2 lbs., \$2.35; 5 lbs., \$4.50; 10 lbs., \$8.75; 25 lbs., \$21.00.

HUDSON SPRAYERS & DUSTERS

The Hudson line represents the best and newest developments in sprayers.



FAVORITE NO. 9

134 Gallon Sprayer with Saf-T-Lok

A favorite with the ladies because it's light, easily filled and closed and has a nozzle that instantly adjusts to give extra-fine, fine, medium, coarse and long distance spray. It is the world's finest home and garden compression sprayer.

No. 9 Favorite \$9.90

HUDSON CLIMAX

31/2 Gallon Open Top Compression Sprayer

Handles insecticides, weed killers, white-wash and cold water paints. Tank of premium galvanized with open top for easy filling, emptying and cleaning. Comes equipped with 24-inch hose, 22-inch brass extension rod with spray nozzle and three spray discs.

No. 335G Climax.....\$11.20

HUDSON BOOSTER

3 Gallon Compression Sprayer

A popular sprayer with galvanized tank and funnel top. Excellent for all around garden, lawn and farm work.

HUDSON BUGWISER

2½ gallon tank with funnel type opening. Large enough to be practical but not too heavy to carry.
No. 220 Bugwiser \$6.96

HUDSON CADET DUSTER

A popular compact duster for use about the home and in small gardens.

Powder reservoir 11/2 inches by 6 inches.

No. 673 Cadet.....\$0.65

HUDSON NEBULIZER SPRAYERS

Hudson Nebulizer Sprayers shoot a floating cloud of mist: Smooth, easy action. No dripping, no mess and more kill.

No.	208	Half Pint Super Cloud\$.40	
No.	333	Pint Super Fog	
		Quart Super Misty	
No.	409	2-Quart Super Rapid 1.40	

PEAT MOSS



Premier Peat Moss loosens heavy soils . . . gives substance to light soils . . . gives all soils loam-like texture . . . prevents surface crusting. The result is that Premier makes soils "breathe deeply" and retain moisture, thus enabling roots to develop to their maximum vigor. Healthy roots grow healthy mum vigor. piants.

Horticultural grade Peat Moss

Chubby	Bale	(about	30	lbs.)		 	 \$2.10
Handy	Bale	(about	70	lbs.)		 	 3.75
Large E	Bale (about 10	5 1	bs.)		 	 .5.40

HUDSON COMET



An excellent popular priced quart continuous sprayer. Does a fine job Does a fine job with fly oils and repellents, insecti-cides and disinfectants.

No. 431 Comet \$1.10

HUDSON MERCURY

The very popular, all purpose, continuous sprayer now further improved with the new Hudson two way nozzle. Made of heavy tinplate with full quart capacity.

No. 433 Mercury......\$1.50

HUDSON CARDINAL

A three quart galvanized continuous spray pump. The larger than ordinary capacity makes this an ideal sprayer for use in dairy barns, poultry house, public buildings, etc.

No. 436 Cardinal.....\$2.30

HUDSON ECLIPSE

The last word in continuous sprayers. Stainless steel pump with corrosion resistant container. Patented two-spray nozzle that changes from light to heavy at the flick of a finger.

Quart container that is interchangeable with standard mason jars. This is the finest and most durable small sprayer that we have ever seen.

No. 477 Eclipse.....\$4.00

HUDSON HANDY

A low priced but good quality and efficient intermittant sprayer. Full quart size.

No. 400 Handy.....\$0.52



HUDSON ADMIRAL DUSTER

An outstanding duster for use in gardens, homes, basements, poultry houses, etc. Good for applying Cyanogas in rodent extermination. Easy to fill and holds one quart of powder.

No. 766B Admiral....

HUDSON PATROL DUSTER

The Hudson Patrol Duster, with patented "whirlwind" action efficiently discharges even heavier dusts like lime and sulphur. Can be used with any powder pesticide anywhere.

Glass jar interchangeable with standard fruit jar, permits keeping various powders on hand for instant use. Ruggedly built, perfectly balanced, easy to use without tiring.

Powder Reservoir—Sturdy 24-oz. glass jar with standard fruit jar thread. Special gaskets insure air-and dust-tight seal.

No. 612 Patrol—With 2 extensions, 2 nozzles......\$1.40



Cyanogas A is a grayish powder that gives off hydrocyanic-acid gas when exposed to the air. This gas is deadly to rodent and insect pests and will kill them almost immediately kills ants, gophers, moles, rats, ets.

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KILL WEEDS CHEMICALLY

No more endless and back breaking weeding to rid your lawn of ugly dandelions, plaintain, chick-weed, etc. Just spray them away.

BARTELDES

2, 4-D LAWN WEED KILLER

This is an Amine solution which is less volatile than the Esters and therefore does not drift as badly as do some others. But care must be taken to avoid letting the fumes drift on flowers, shrubs and vegetables.

It kills dandeloins, plantains, chick-weed and many other broad leaved plants without damaging the grass. The easiest and most convenient way to apply it is with a one-gallon applicator. Note low price.

8 oz., 60c; pint, 90c; quart, \$1.65.

BARTELDES AGRICULTURAL WEED KILLER

40% Ester (Butyl Ester)
Contains 2.64 pounds 2, 4-D acid per gallon

The standard formula for agricultural and commercial spraying.

Requires $\frac{1}{2}$ to 3 pints per acre, depending upon crops and on weeds to be killed.

You will find complete information on the label. Better results are obtained if weed killers are applied while weeds are young and are growing rapidly.

Prices subject to market changes.

1	Gallon						 				ċ	 				٠.							:	٠.					.\$6.48	per	gallon
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BARTELDES

No. 200 Brush Killer

Contains 1 lb., 2, 4-D and 1 lb. 245 T per gallon.

Highly recommended for control of woody plants which are generally hard to kill. Effective on Osage Orange, Black Jack Oak, Hickory, Brambles and many others.

Can be dissolved in fuel oil or mulsified in water.

For stump treatment dissolve one gallon of Brush Killer in 5 gallons of Diesel Fuels and apply thoroughly to freshly cut surfaces

Quart, \$2.70; gallon, \$8.90. As for prices on larger quantities.

WEED-NO-MORE

WEEDONE

Contains the powerful 2,4,5-T and 2,4-D

Now Weedone kills woody plants as well as dandeloins, plantains and other lawn weeds, without killing grass. It kills poison ivy, poison oak, the brambles (blackberry and raspberry), honeysuckle and over 90 other woody plants. Sprayed on top and sides of tree stumps, it prevents resprouting. 8 oz. can \$1.00; 1-qt. can, \$2.75; 1-gal. can, \$6.95; 5-gal. can, \$25.00.

WEEDONE CRAB GRASS KILLER

WEEDONE Crab Grass Killer is non-poisonous. Contains Potassium cynate. Kills crab grass and chickweed without killing clover, bluegrass and other desirable grasses.

iMPORTANT. Spray early when crab grass is in seedling stage.

Harmless to soil. Breaks down to beneficial fertilizer elements. Readily soluble in water. Easily cleaned from sprayer with plain water.

$6\frac{1}{2}$ -oz. can (treats 1,000 sq. ft. seed)	ling stage)\$1.00
26-oz. can (treats 4,000 sq. ft. seed!	
5-lb. can (treats 16,000 sq. ft. seedl	ing stage) 8.85

STOP GRASS

(Contains Maleic Hydrazide)

Recommended to retard growth of grass on edges, around lawn fixtures, along fences and other hard to reach places.

NOT NOW RECOMMENDED FOR LAWN PROPER.

Spray on grass early in season and growth will be retarded for 4 or 5 months.

$1\frac{1}{2}$ -oz. (treats 400	ps (ft.)\$1.	.00
4-oz. (treats 1,100	sq.	ft.)	.25
1Ib. (treats 4,400	sq.	ft.)6.	.00



PAX

The Effective Crab Grass Killer

Pax works differently from other Crab Grass killers in that it starts at the source. Pax kills the Crab Grass seeds before they germinate. Crab Grass is an annual and if you kill the seeds you will have no plants.

Don't expect perfect results the first year, but after applying in two successive springs your lawn will be a thing of beauty.

Pax is not only a Crab Grass killer but is also a fertilizer. Pax does two jobs at once, kills Crab Grass seed and fertilizes the Blue Grass.

But—AND THIS IS IMPORTANT—apply Pax EARLY in the spring, before any Crab Grass seeds have sprouted and FOLLOW DIRECTIONS in the bag. Apply 6 lbs. or more, NOT LESS, to each 100 sq. ft., or 100 lbs. to a space 40x40 feet.

50 lbs. for \$5.25; 100 lbs. for \$9.50; f. o. b. Lawrence.

CLIPPER SEED AND GRAIN CLEANERS

The Clipper has been the standard farm seed cleaner for almost a century. The Clipper cleans by means of screens which separate seeds and grains of different sizes and also by means of a vertical air-blast which separates seeds and grains of different weights. The combination does a wonderful job.

The No. 2B comes equipped with twelve screens, selected to clean most seeds and grains. Other screens can be added as needed.

No. 2B—Standard	108.95
No. 2B—Special with Bagger	
No. 27—With six Screens and Bagger	375.00

All above f. o. b. Lawrence and subject to change.



BARTELDES SPECIALS

Top Quality Formulations at Attractive Prices

BARTELDES

Ready Mixed Warfarin Rat and Mouse Killer

We have, in the past 80 years, offered many kinds of rat killers, but Warfarin unquestionably has proved itself to be the best.

It works slowly and rats and mice eat it for several days before they die. Because Warfarin is tasteless and odorless, and because rats do not die immediately, no "Bait-Shyness" is developed.

It will destroy whole colonies and keep them under control. BARTELDES' READY MIXED WARFARIN RAT AND MOUSE KILLER. 1 lb., 75c; 3 lbs., \$1.80.

WARFARIN CONCENTRATE. 4/5 oz., 52c; 4 oz., \$1.75; 8 oz., \$3.00; 1 lb. \$5.00.

BARTELDES Household Spray

Contains Pyrenone, Lethane and Lindane. Unsurpassed for carpet beetles, moths, fleas, spiders, roaches, bed bugs, mosquitoes and many others.

Do not use on pets or humans. Sprayer included.

Pint 59c; quart, 98c; gallon, \$2.95.

BARTELDES AERSOL Insect Bomb

Contains D D T and Pyrenone. Just press the button and spray. Kills moths, flies, fleas, ants, silverfish, mosquitoes, bedbugs, roaches and waterbugs.

12-oz. bomb\$1,30

50% WETTABLE D D T

A convenient and economical way to buy D D T. Can be mixed with water for spraying. Do not use on dairy cattle.

1 lb., \$0.72; 4 lbs., \$1.92.

STOCK SPRAY NO. 2

Contains Pyrenone and Methoxyclor.

Protects livestock against annoyance of stable flies, house flies, mosquitoes, gnats and horn flies. Spray lightly over entire animal except face and udder of cows.

Gal., \$1.65; 5 gals. at \$1.48 per gal.

METHOXYCLOR

50% Wettable Powder

Recommended for use on dairy cattle, livestock of all kinds, field crops, fruit, vegetables and farm buildings.

1 lb., \$1.20.

1 16., \$1.20.

B. H. C. (Wettable Powder)

12% Gamma Isomer of Benbene Hexachloride. For spraying hogs, cattle, sheep and farm buildings but not on dairy animals. Also effective on grasshoppers, plum curculio and fruit tree aphids.

1 lb., \$.90; 4 lbs., \$2.60.

BARTELDES Home Orchard Spray

A safe, effective insecticide and fungicide for control of the major orchard pests during the growing season.

We have used this with excellent results.

Spraying is a must. It should be done thoroughly and at 10 to 14 day intervals.

Use 5 tablespoonfuls to one gallon and one pound to 18 gallons. 1-lb. can, \$1.50; 3-lb. bag, \$4.25.

BARTELDES Rose Dust and Spray

Formulated especially for roses Triple action pest destroyer.

Kills chewing insects, sucking insects and prevents plant diseases such as Leaf-spot and Mildew.

Keep your roses clean by starting early in the spring and spray them weekly. You will be amply repaid by having healthy, thrifty roses.

12-oz. Pumpgun, 89c; 1-lb. can, 75c.

BARTELDES 25% DDT Emulsion

For the control of Corn Borer, Flies, Canker Worms on Elm Trees, and many insects on live stock, crops and buildings.

Use 2 quarts per acre on corn and apply when corn is 2 to 3 feet high and there are about 50 egg masses to 100 plants.

Must not be used on dairy animals or animals that are to be slaughtered.

Pint, 75c; quart, \$1.25; gallon, \$3.50. Ask for prices on larger quantities.

BARTELDES 45% Chlordane Emulsion

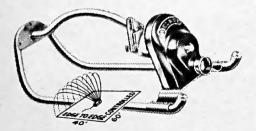
Many insects are susceptible to Chlordane. Among these are grasshoppers, alfalfa weevil, lygus bug, seed corn maggot, army worm, blister beetle, aphids, thrips, corn ear worm and many others

8 oz., 75c; pint, \$1.25; quart, \$2.37; gal., \$8.20.

"FULL DIRECTIONS ON EACH PACKAGE"

MELNOR SWINGING SPRAY

Save time and water with this sturdy Swinging Spray. Delivers a gentle spray over a rectangular area, thus preventing overlapping. Can be adjusted to exact areas and up to fixed lines. Guaranteed one year. \$11.95.



GLASS MEASURE

A convenient little measure for accurately measuring liquids and powders. Graduated from $\frac{1}{4}$ teaspoonful to one ounce liquid. 15c.

Vegetables free of insects and disease . . . dust them regularly with End-o-Pest. It's the protection all gardens need from chewing and sucking insects and most fungus diseases. In a handy, refillable dust gun.

SQUARE SQUIRT

Solid brass, no moving parts, distributes an even rectangular spray. Gets into corners and won't wet sidewalks. \$2.10.

MAGIC CARPET LAWN GRASS

This mixture contains well proportioned quantities of Kentucky Blue Grass, White Dutch Clover, Domestic Rye Grass and Red Top seed. The Rye Grass and Red Top provide a fine green covering in a very short time and thereby serve as protectors for the slower growing Kentucky Blue Grass. The latter is considered the permanent base for the lawn and, being thriftier, will eventually crowd out the Rye Grass. One pound to 120 square feet.

SHADY NOOK LAWN MIXTURE

A mixture of good clean seeds including Poa Trivialis which is a type of Blue Grass especially adapted to shady places.

KRILIUM

KRILIUM treatment turns dense, hard soils into loose, spongy soil. Plant roots can grow and breathe. Water can percolate down to the roots. The treated soil becomes so easy to spade and cultivate! Plants can more easily break through loose, porous soil—so seeds germinate more readily. Good root growth takes place in the treated soil because root tendrils do not have to struggle through hard-packed soil.

Fertilizers appear to work more effectively in the treated soil. KRILIUM treatment improves the environment for the plants and for the highly important soil bacteria. KRILIUM treatment does all that is structurally possible to turn a problem soil into a good soil for growing. 1 lb., \$1.69; 5 lbs., \$6.95.

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Flower Seeds

Burning Bush
IFCInside Front Cover IBCInside Back Cover BCBack Co



THERE IS NOTHING THAT ADDS SO MUCH TO THE BEAUTY AND THE VALUE OF YOUR HOME AS DOES A NICE LAWN

Modern fertilizers, chemical weed killers, watering devices have all made lawn maintenance comparatively simple.

BUT it is of utmost importance to do a thorough job in making a new lawn.

NEW LAWN

- 1. Condition the soil. If it is too sandy, add sufficient peat moss or weed-free manure (if you can get it); if too heavy, use Krilium or some other soil conditioner, peat moss, manure, Vermiculite or coarse sand.
- 2. Spade or plow to a depth of 4 to 6 inches and pulverize thoroughly. Grass seeds are very, very small; need a finely pulverized seed base.
- 3. Apply a good commercial fertilizer at a liberal rate. Apply it evenly and work it into the top 2 or 3 inches with a rake. Water thoroughly and wait a day or two before seeding.
- 4. Sow good grass seed at the rate of six to eight pounds per 1,000 square feet. Rake the seed in lightly.
- 5. Roll or tamp to imbed seed and insure perfect contact between seed and soil. A tamper or wide board can be used on small areas if a roller is not available.
- 6. Cover entire area with peat moss about ¼-inch deep. One large bale will cover about 1,200 square feet. This holds moisture in the soil and prevents baking.
- 7. Water thoroughly, using a fine spray. Keep the ground moist but not sopping wet. Water once or twice each day for three or four weeks, then water as needed but always water thoroughly.

OLD LAWN

Does your old lawn need rejuvenation? Lawn grasses need food, water and air. Fertilizers and water will take care of the first two needs but the supplying of air is generally neglected.

Tramping and rolling packs the soil so that it will not properly take water and does not get air. The application of sand and peat moss is often beneficial but this does not get down to the roots.

Aerating with an Aerifier is the answer. The Aerifies is a tool that takes out a 4-inch plug about as large as your finger. While these plugs are lying on the ground, scatter some Vermiculite or peat moss, together with some fertilizer and a little grass seed, on the plot. Then drag a door mat over the plot so that this material will fall into the holes. Take a small space at a time and when you have gone over the entire lawn you will have the kind of a lawn that you dream about.

BARTELDES LAWN GRASS SEEDS

Sow Barteldes Seeds and you sow the finest. Golf Courses are seeded by experts and they demand the very best. The Lawrence Country Club, Denver Country Club, Cherry Hills, Park Hill, Broadmoor Hotel at Colorado Springs, Greeley, Salina and many, many others were seeded with Barteldes Seeds.

The Barteldes Seed Co. Denver, Colorado Gentlemen: September 11, 1927 Colorado Springs, Colo.

We have used your seeds on the Broadmoor Golf Course for a period of five years. It is a keen satisfaction to know that we can rely on your statements pertaining to quality and purity of the grass seeds sold by The Barteldes Seed Company.

The New Broadmoor Hotel polo field was sown last June and is now ready for play.

Barteldes Seed was used exclusively on the new polo field and I am sure that your seeds are equal to seeds priced much higher.

Very truly yours,

W. H. THORNE, Supt. Broadmoor Golf Coarse and Polo Field

Broadmoor's new nine holes was planted in 1950 with Barteldes Seeds exclusively.

- KENTUCKY BLUE GRASS—Always reliable. The standard grass seed in America for lawns and pastures. One pound should be sown for every 150 square feet, or for every plot 10-15 feet. Sow 30 pounds to the acre for pasture.
- MERION BLUE GRASS (B27)—Merion Blue seems to be as good as the turf authorities say it is. It has a dark green color, grows thicker than Kentucky Blue, takes less water, is less subject to disease, keeps out Crab Grass better. Because of its strong underground roots or rhizomes it should be able to establish itself in an old lawn and take over. Seed supply is very limited.
- SEASIDE BENT GRASS (Creeping)—Widely used on putting greens on golf courses. Takes extra care for best results—closer and more frequent movings, more fertilization, and more water. Very fine bladed. Keeps out weeds as it makes a thick turf. Sow one pound to 200 square feet for new lawns.
- ASTORIA and HIGHLAND BENT—Quite similar. Highland is grown at a higher altitude and under dryer conditions. Makes a thick turf and stays mixed with other grasses whereas Seaside will cross out other grasses. Either Highland or Astoria are excellent for thickening up an old lawn. Sow one pound to 200 square feet on new lawns, and one pound to 400 square feet on old lawns.
- POA TRIVIALIS—Bright green, fine bladed. Does well in shade, especially damp places.
- CHEWING FESCUE—Round bladed, fine grass, that does well in shade, especially in dry places. Stands a lot of tramping.
- RED CREEPING FESCUE Similar to Chewing but spreads more.
- NATIVE or DOMESTIC RYE GRASS—A quick growing annual, slightly coarser than Blue Grass. A good nurse crop variety.

FOR HIGH QUALITY MIXED LAWN GRASSES --- See page 36

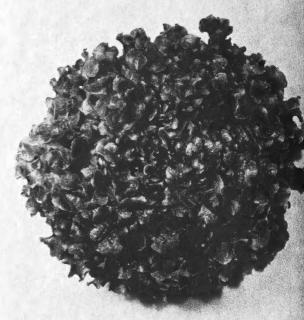


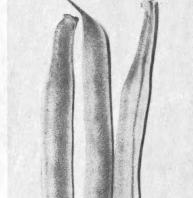
Salad Bowl Lettuce

A distinct new type of Lettuce.

Salad Bowl is a large, mid-season, medium green, lobed leaved, slow-bolting, non-heading lettuce. It differs in appearance from all other varieties of lettuce in that the leaves are deeply lobed giving the mature plant a resemblance to endive. The lobing of the leaves make them less subject to injury by breakage in handling. Very slow to shoot and develops large mounds of tender leaves before bolting. An excellent source of Vitamins A and C.

Salad Bowl is a very attractive home garden lettuce. Pkt., 20c; $\frac{1}{2}$ oz., 40c; oz., 75c.





Wade Bean

This bean, increased under U. S. D. A. No. M1515-1-7-1-2 is credited to the late Dr. B. L. Wade who was formerly with the U. S. D. A. Regional Breeding Laboratory, Charleston, South Carolina. It promises to be an outstanding bean, winning Gold Medal Award in 1950, All America Trials and topping all vegetables in the total number of points registered.

It is excellent for home garden and market garden and has some unique characteristics, which should make it well adapted for processing.

Plants are rugged, bush type about 18 to 20 inches tall and pods borne well off the ground. Pods deep green, $5\frac{1}{2}$ to 6 inches long, round, tender and meaty. Holds smooth edible stage longer than most and a most productive bean. Seeds, oblong with reddish brown color.

BUY YOUR BARTELDES SEEDS AND SUPPLIES FROM YOUR FRIENDLY LOCAL DEALER

This local dealer is your friend and neighbor. He carries adequate stocks for your convenience and can help you with your gardening problems.

Should you want some varieties or some items that he does not have in stock he will be glad to get them for you.

Consult him and buy your Barteldes Seeds of him.

Your garden needs Barteldes Seeds